

1882.
S!
LY.
ur readers
following
EM
to secure
one book
e of the
books you
books from
a number
ur readers

MICHIGAN FARMER

AND STATE JOURNAL

AGRICULTURE.

JOHNSTONE & GIBBONS, Publishers.

DETROIT, TUESDAY, SEPTEMBER 5, 1882.

PRICE, \$1.65 PER YEAR

VOLUME XIII.

"PRACTICE WITH THEORY AND SCIENCE."

NUMBER 36.

CONTENTS.

Page	Page
Agricultural Notes by the Way—The Valley Wheat—Notes from Cass County—Polled Aberdeen of Angus Cattle—Annual Farmers' Picnic—Drying Hay by Machinery.....	1
How Matters—How John Splan Explained a Pacing Race—Human Pro-Judice.....	2
The Farm—Cattle Diseases in New York—Storing Potatoes—The Price of Hops—Economy in Feeding Cattle—Agricultural Items.....	2
The Polling Yard.....	2
Developmental—Spare the Forests—Black Raspberries and Blackberries—Rare Orchids—Old Strawberry Beds—Management of Grapevines—How Potatoes Grow—An Experiment with the Pear Blight—Horticultural Notes.....	8
Editorial—What—Corn and Oats—Hops and Potatoes—The Price of Hops—Economy in Feeding Cattle—Agricultural Items.....	2
Barley—Daily Produce—Wool—A Reply to Mr. Morris—The British Grain Trade.....	4
New Summary—Michigan—General.....	4
Foreign.....	4
Prayer—What My Lover Said—Life Hath Its Barren Years.....	8
Medications—Artful Dodgers—A Northern Is—Through the Suez Canal—Progress in Telephone—How Chicago Gets Its Name—Twenty-Five Years' Diet on Seals—Lace Made of Vegetable—The Umbrella—Goldsmith and Johnson—Remarkable Finds of Gold—Various—Chaff.....	7
Resolutions—The Creamery System—A Defense of Fashionable Girls—Cousins Again—Useful Receipts—Metastatic Rheumatism—Sunac.....	7
City Items.....	8
Commercial.....	8

Agricultural.

NOTES BY THE WAY.

Among the Farmers of Wayne and Oakland Counties—A Shorthorn Herd—Appearance of the Corn Crop.

The past week we paid a long promised visit to Mr. A. S. Brooks, the well known Shorthorn breeder at Wixom, Oakland Co., and with him had a look over quite a stretch of country around the thriving villages of Wixom, Northville, and Novi. The weather was delightful, as the sun was obscured by clouds, and we thoroughly enjoyed the visit. Arriving at Wixom on the morning train, we found Mr. Brooks in waiting, and started for his farm, some four miles south. It is a nice country through this part of Oakland County, and the corn crop, which many had begun to despair of, is looking very well indeed. It is well watered, and will be out of danger in a week or so. Here and there, where the land laid low, the corn would be drowned out, but the general appearance of the fields was good. At Mr. Brooks' place we met two of the pioneers of this section, Mr. Johns and Mr. B. Ackman. These men, with Mr. Brooks, are the only ones left of the old settlers, and are known to every one for miles around. Their reminiscences of early days in Michigan were very interesting.

In the afternoon we had a look over Mr. Brooks' herd of Shorthorns, one of the oldest in the State, but never, probably, in better shape than it is to-day. The animals are all in a good, healthy condition, not loaded with fat, and each one a breeder. Mr. Brooks has always made milking qualities one of the principal points aimed at in his breeding, and his herd to-day shows how well he has succeeded.

At the head of his herd is the young bull Oakland Rose of Sharon 4452, bred by Wm. Ball of Hamburg, and sired by Lord Barrington 24 30115, out of Miss Samsangmon (vol. 18, p. 13822) by Count Tagenot 9604, and tracing back to Rose of Sharon by Comet Hall (1855), imported Rose of Sharon by Belvedere (1706) and Red Rose 9th by Hubback. Lord Barrington 24 was bred by Avery & Murphy, and was by 23d Duke of Aldrie 19393, out of Duchess of Bedford by Duke of Oxford and Gloucester (23490), also tracing back to Belvedere (1706). Oakland Rose of Sharon was calved January 1, 1881, is a red in color, with a star in forehead and a dash of white on his left flank. He was exhibited as a calf at the last State Fair, and gave promise that he would develop into a fine animal. He is better in every respect than we expected to see him before he reached maturity. He is straight top and bottom, well ribbed up, good in the quarters, and has a fine, well shaped head. He is as good as his breeding, and it will be seen that this is high up in the very best blood of the breed.

Mr. Brooks has two or three families which he has held on to ever since he commenced breeding. One of these is the Bonnie Lass, represented by Bonnie Lass 5th, a red cow by Red Prince 24568, out of Bonnie Lass 3d by 11th Duke of Hilldale 19397, and her young heifer, also by Red Prince. The in-breeding in this case did not seem to affect either the appearance or the vigor of the animal. Bonnie Lass 5th was calved August 9, 1877, and is a fine specimen of a good useful animal, both as a breeder and milker. Medusa 3d and her three daughters represent the Gwynnes. She was calved May 1, 1877, bred by Avery & Murphy, of Port Huron, and was by 23d Duke of Aldrie out of Medusa, tracing back through Dorothy Gwynne by Conservator (3472) to Nell Gwynne by Phenomenon (491), and thence to Bright Eyes by Favorite (252). She is a roan in color, and her three daughters are of the same color, although sired by strong-bred red bulls. This shows how strong the Gwynne blood is. These four animals are a very attractive lot, with the constitution

and substance for which the family is noted. We next had a look at Oxford's Rose 21, a cow also bred by Avery & Murphy, calved October 28, 1870, red in color with a star in forehead. She is by 23d Duke of Aldrie out of Oxford Rose by King of the Roses (23043). She was in the stall with a bull calf by her side sired by Red Prince. She is a large, square built animal, with every appearance of a sound constitution, and a regular breeder. Her bull calf, now old enough to be taken away, is the best animal of its age we have seen in a long time. He is a deep red, straight backed and straight legged, with a beautiful head tapering down to a small muzzle, and his hair long, soft and mossy to the touch. He will be a hard one to beat.

The Bell Duchesses are represented by Third Bell Duchess of Fairholme, a young cow with her first calf. She was bred by T. C. Jones & Son, Delaware, Ohio, and was got by Duke Dunmore 35348, out of Aldrie 19372, and running back through Ross Clay by Fordham Duke of Oxford (31118), and imp. Filbert 2d Cleveland Lad (3406), to Belvedere (1706). Both she and her calf are red in color. She will please any one who fancies a fine Shorthorn. Her calf is by Benedict by Mazurka Lad. Belle Mahone 5th, the first prize two year old heifer at the last State Fair, was next looked over. She had a nice heifer calf by Benedict at her side. Her sire was Red Prince 24568, and her dam Belle Mahone 3d by Plumwood Lad K 21322, running back through John O'Gant 17073, to Old Splendor 24164. This Old Splendor stock has always been noted for milking qualities, and wherever we have met his descendants this is still a prominent characteristic. Of the Phyllis family Mr. Brooks has two, Red Bird and her heifer calf. She was calved in 1873, and bred by C. T. Redmond, Clark Co., Ky. Her sire was Duke of Greenwood 9855, and she was out of Jessie Duncan by El Hakim 5524, tracing back to imp. Young Phyllis by Fairfax (1023). She has been a regular breeder, and a very useful animal to her owner. Mer present calf is by Red Prince.

Of the Pomona family there are four representatives in this herd, Rowena 11th and her three daughters. She was bred by Walter Handy, Jessamine Co., Ky., and calved February 19, 1873. Soon after Mr. Brooks got her she met with a severe accident that inflicted a permanent injury on one of her hips that detracts greatly from her appearance; but she has proved a good breeder, and her calves are of the right sort. She was got by Corporal 7700 out of Rowena 10th by Clark's Duke 6340, tracing back to imp. Pomona by Bedford Jr. (7701).

Jessie of Oakland, a red cow bred by Mr. Brooks, now eleven years old, was by John Gloster 8424, out of Moss Rose by Starlight 6207, also traces back to Old Splendor. She has bred every year, is a large, deep-bodied cow with plenty of substance, and looking remarkably well for her age. She is a deep milker, and a smooth, level cow. If fitted up for the ring she would be a hard one to beat.

There are a number of other cows in this herd, but lack of space prevents our referring to them at present. The whole herd is remarkable for its evenness, both in quality and color, nearly all being reds, with a few red roans. The stock was all running in the pasture, and although the flies were just swarming around them, they looked smooth and in excellent condition. Mr. Brooks has made it a rule never to spoil his breeding animals by over-feeding, and as a result he has not an animal that is not a regular breeder. He has divided up his farm, locating one of his sons upon a part of it, and he proposes to sell a portion of his herd, as it is larger than he can properly care for. He will not sell the whole of any of his families, as he does not propose to go out of the business, but he will sell a part of each, warranting every animal to be a regular breeder. To any one who wishes to start or add to a herd of Shorthorns, this is an opportunity to get the results of the experience of one of the oldest and most successful of our Michigan breeders. He has also a number of young bulls, of approved breeding, which he would like to have those who need such animals look over. They are a fine lot, with good colors and of excellent breeding.

Mr. Brooks' crops were all good this season, and he was fortunate in getting his wheat secured in good condition with the exception of a few bushels. His Fultz returned about forty bushels per acre machine measure, and his Clawson over thirty.

Next morning we drove over to see Mr. Wm. Johnson, near Northville, and he had with him his very fine farm. It is beautifully located, has two fine orchards, fine pastures and excellent water all over it from never failing springs. He is one of the few men who have a fair crop of apples this season, and he attributes it to the use of Paris green on his trees. His wheat crop was all in before the rain. He had over 100 acres, and it went over 24 bushels to the acre. Mr. Johnson was once in Shorthorns, but went out. His inclinations still run that way, and he has recently purchased a young bull from the Agricultural College.

He is by Gen. Custer, by 23d Duke of Aldrie, but we forget the breeding of his dam. Here we saw the herd of Shorthorns Mr. Mitchell of this city is getting together, and which are under Mr. Johnson's care. They are looking first-rate, and when added to those he has on his farm near Mt. Clemens, will make a fine herd.

After a good dinner and a pleasant visit with Mr. Johnson and his family, we started for the residence of Mr. L. L. Brooks, near Novi, driving across a beautiful country covered with fine farms, handsome farm-houses and substantial looking farm buildings. The steam thrasher was at work at various places, and the cornfields showed a wonderful improvement from what they were thirty days ago.

Arrived at Mr. L. L. Brooks', we looked over his Shorthorns, which he was just getting ready for the State Fair. He has the bull formerly owned by Mr. James Moore, of Milford, whose purchase we noted a short time ago in the FARMER, and a few good cows. Mr. Brooks is a new beginner, but he comes from a good stock to make a good breeder of Shorthorns, and we expect to see him yet in the front rank. Returning from Mr. L. L. Brooks' in the evening, we made a short call upon our old friend Mr. N. A. Clapp, the noted breeder of Berkshires. We found him in the midst of his dairy cows, and received a warm welcome from him and his father. On this farm the dairy is one of the main reliance, and has been for some time. Knowing this, we were a little curious to see what breed had been selected by a man who had no prejudices as to any particular breed, but wanted the one that would pay him best. Every one of the cows were high grade or full blood Shorthorns, largely bred from the old Brooks herd. We expressed a little surprise that some one of the dairy breeds had not been tried, but Mr. Clapp said he was satisfied with the Shorthorn after some years' experience, and was willing others should take what breeds they pleased. "The Shorthorns are good enough for me," said Mr. Clapp, "and I want to see some breed that will get up and beat them when it comes down to business." Mr. Clapp had just been making a shipment of some fine young Berkshires to a Mr. Cole of Lansing, and he said he thought he had sent him the best he had ever bred. He still prefers the Berkshire as the hog for Michigan farmers.

Saturday morning we drove to Wixom station at an early hour, intending to visit the farm and look over the herd of Shorthorns owned by Mr. Wixom. His partner, Mr. Sibley, however, informed us that he was in Chicago attending the sales at Dexter Park, so we took a look at his young bull Kirklevington Lad 2d, bred by Mr. Thos. Birkett, of Base Lake. When Mr. Wixom bought him he did a good day's work. He is red, with some white, and we want to see something that will beat him as a show animal. He will not be a year old until October, but is large for his age. He is by 2d Duke of Kirklevington 26278, out of Kirklevington Maid by Mazurka Lad 15098, running back through the cows Kirklevington 15th, 11th, 7th, 4th and 1st to the bulls Duke of Northumberland (1940), and Son of 2d Hubback (2683).

THE VALLEY WHEAT.

To the Editor of the Michigan Farmer. I have some of the Valley wheat which Mr. Teeter advertises in the FARMER. It is from seed procured from Ohio last year. It was grown in the same field with Clawson, and had the same culture. The Clawson yielded twenty-five bushels to the acre, and the Valley, a trifle over thirty-five bushels. I have had some ground, and it makes the nicest bread I ever ate. My wife says she never had bread rise so quick. It did not rust with me where Clawson and Fultz both rusted badly. It is a great wheat to stool out, not requiring so much seed to the acre. For reference as to the truth of my statements I will name Messrs. A. N. Kimball, Whipple Bros., C. M. Wright, postmaster, L. L. Brooks, and C. Cogswell, of Novi, or C. V. Babcock, of Southfield. I have tried the Scott wheat and abandoned it. GEORGE W. TIBBETTS. Novi, Sept. 1, '82.

A BUFFALO dispatch of the 3d inst says: Benjamin Baker, the proprietor of the East Hamburg orchard, has returned from a tour of observation through all the principal apple-growing counties of the State. He reports the crop a total failure. The counties of Niagara, Genesee, Orleans, Cattaraugus, Chautauque, Erie, Monroe, Livingston and Oneida will barely produce enough of this fruit for the village markets; whereas these banner apple-growing counties have supplied to a great extent all the large cities of the west, and have even exported in liberal quantities.

Something unusual in the history of Ohio is now occurring in the mining region of the Ohio River. Corn is \$1.05 a bushel and wheat only 55 cents, and the result is that they are feeding wheat to stock in preference to corn. The same is said to be the case in some parts of Iowa.

NOTES FROM CASS COUNTY.

The Farm of B. G. Buell.

In this correspondence of last week, it was intimated that some notes of interest were awaiting another issue, from the farm of B. G. Buell, of Little Prairie Ronde, in Cass Co. This farm of 395 acres lies on the southern border of the prairie, and includes nearly 100 acres of heavy oak timber. The 300 acres of improved land is mostly prairie, very nearly level, and fenced into fields of about 40 acres each. This land has been under cultivation for 40 years or more, and produces as fine crops of wheat, corn and clover as ever, and with the mixed farming practiced by Mr. Buell, will doubtless continue to produce good crops, under his management.

In cultivating a farm of the size of this, it is necessary to economize the time, in order to complete the work in season. This Mr. Buell has been able to do by the employment of the best implements and good teams. His hauling is all done on four inch tire wagons; he has three of them, and teams and force to man them, so that 100 acres of wheat can be stacked in a very short time. He of course cuts his grain with a self-binder. He has had constructed for him broad harrows, which, with three horses, would go over 30 acres a day, but plowing would not yield to this intensive system of farming. Two acres a day with a man and team was too slow as compared with the possibilities in other directions. The Chicago screw pulverizer was tried as promising to meet the requirements. He is pleased with it. It is used with four or six horses, according as the soil is yielding or otherwise. The horses are driven abreast, so that one man handles the implement and team. The trial of the machine last fall in preparing the ground for wheat as related by Mr. Buell at the wheat meeting reported last week, was satisfactory, but to test its capacity further he tried it last spring on 40 acres of heavy clover sod intended for corn. He went over it three times in six days, the last time he hitched a marker behind the machine, and the next two days completing the work in eight days, with one man and six horses. The showing at this time is as fine for a big crop of corn as there is in western Michigan. This implement does not completely invert the soil, but loosens and mellow it to a maximum depth of six inches. This depth cannot be reached at the first operation, unless the soil is mellow, such as corn or oat stubble. Mr. Buell thinks he now has reached the culmination of his desires to get along with a maximum amount of work, with a minimum force of men. His son, who is now working on the farm, and himself can perform a large part of the labor necessary to carry on the farm. Mr. Buell has 35 acres in orchard, mostly apple, from which he sold last year \$2,500 worth of fruit. In common with most apple orchards this year, it is very nearly barren of fruit.

The stock on the farm is from the very best blood of its kind. He has several Dukes of Perche colts and others of mixed Norman blood. His cattle have become patterns of the Shorthorn mold, by a judicious crossing with pure bred animals. His flock of Merino sheep will furnish specimens eligible to registry, but the crowning glory of Greenwood stock farm is the 200, old and young, Poland-China pigs. Mr. Buell has been fifteen years breeding swine, and has settled down upon this breed as the most desirable, all things considered. They keep in good flesh on pasture, fatten quickly, and at any age. The typical hog of the country is not usually a model of grace in outline, but a search along the fence corners in the clover and stubble fields for the different families, revealed many specimens that would make excellent models for a "header" on a show bill for a swine exhibition. The males of different ages are kept in different yards and fields from the general stock, and are selected with an eye to perfection in the general type of the breed. No strictly "show" specimens are kept; all have a large range, and are fed to simply keep them growing. The animals that are not sold for breeding purposes and those not up to the standard, are fed for the block and sold; \$2,500 worth were turned off last year, making \$5,000 for hogs and apple alone, as a result of mixed farming.

Mr. Buell usually raises 100 acres of wheat a year. He harvested 150 acres this year, which is much above the average. He has now on the ground 50 acres of corn, looking very fine. The grounds surrounding the house were originally laid out with much taste. On each side flanking the house stands the original oak forest. This opening out in the "long ago" was reset with specimens of rare deciduous and evergreen trees. Bordering the woods stands a row of Norway spruce, enclosing the grounds like a stockade. Some of these specimens are exceedingly fine, and the proprietor, with an appreciative eye, points to their peculiarities and quaint habits of growth, seeming to enjoy their familiar presence even better than his guests, who have not studied their attitudes so well. There are

clumps of trees, with amplexade in which to swing a hammock, or to stretch for a noontime nap. There are rare varieties of fruits and a splendid flower garden. There are rock specimens, with curious veins and streakings and tints. The house is after the old style of architecture, too cumbersome to remodel, and too good to remove. It is ample and roomy, and as at our visit, often filled with guests—school chums of the young people, or friends of the elder ones. This is the typical farm house toward which city people yearn. It has fruits and vegetables in their season. It has plenty of sweet milk and cream. It has pigs and lambs, and horses and cows, the best of their kind. There are pleasant drives. It borders a lake; there are grand old woods and summits where wide stretches of field and farms are visible. There can be rides on big loads of hay and grain. There is hospitality and health and home life such as the country only can furnish. A. C. G.

POLLED ABERDEEN OR ANGUS CATTLE.

We have received from the authors, Messrs. James McDonald, editor of the Irish Farmer's Gazette, and James Sinclair, an associate editor of the same journal, a history of the Polled Aberdeen or Angus cattle, with an account of the origin, characteristics and improvements of the breed. The work makes a volume of 459 pages, is illustrated with numerous specimens of the breed, and will prove very entertaining to those interested in cattle. We take some extracts from the book respecting the history and characteristics of the breed, as they are being imported in large numbers into this country at present. Respecting their history, the following will be of interest:

"It would seem that formerly there were two types of polled cattle in Buchan. In a communication addressed to us, Mr. Wm. Forbes, Newark Brick-Work, Elton, who had formerly been a farmer in Buchan, and bred polled cattle, says: 'The cattle in Buchan about half a century ago earlier might be said to have consisted of horned and polled black cattle in about equal proportions. The polled cattle were of two classes, one large and another small. I knew the small kind well. They were rather puny creatures, always thin in flesh, and very often badly used. They were pre-eminently the crofter's cow, as they were able to live through the winter on the straw of oats and bere, and water if necessary. Of the larger portion of the cattle, about one-half were just black, excepting the udder, which was usually white, and often the whole underline was white. They could not stand starvation so well as the small polls, but with better treatment they gave a heavier yield of milk. When creamed, however, their milk was thinner than that from the small cows. A considerable portion of the cattle were large-sized, well-fleshed brindled polls; and these were the finest looking animals in Buchan. When well fed, they had a short, glossy coat of hair; some were not so high in favor as the brindled cattle. The polled cattle were the dairy stock. The butter they produced was very fine in summer and autumn, but hard and white in winter. The establishing of a beef trade with England, and the introduction of Shorthorn bulls and turnip husbandry, opened up a new era for Buchan. The native cattle fattened well, and money was made by doing so. Shorthorn bulls were introduced, and put to all kinds of cows. Often when a Shorthorn bull was mated with a small polled cow, the produce was a black poll of the finest character—immensely superior to either of the parents. When a heifer of this stamp was again put to a good Shorthorn bull, the result was quite as fine a black poll of still larger size. If the produce was also a heifer, and mated with a pure Shorthorn bull, the produce was still a poll, yet larger in size, but bluish-gray in color. If a heifer again, and put to a Shorthorn bull, the produce was once more a gray poll, probably lighter in color. When this form of crossing was continued further, Shorthorn cows appeared sometimes with scurs, but often with regular Shorthorns of the male parent. I observed this experiment tried in several cases, with exactly the same result. With the larger polls with white underlines, the horns and color of the Shorthorn bull were earlier transmitted to the produce, generally at the second or third crosses. I there fore look upon the small polls without white spots as the pure original Buchan humie."

The following is a description of the points that should be possessed by an animal of the breed: "In general form a model polled animal differs considerably from a model Shorthorn. Both should be lengthy, deep, wide, even, proportionate, and cylindrical. The polled animal, however, should be more truly cylindrical in the body than the Shorthorn. Its points should be more quickly rounded off; or, in other words, the frame of the polled animal is not so fully drawn out to the square as that of the Shorthorn. Critics have pointed out in some of the best polled animals now or recently living, a tendency to approach too nearly to the square type of the Shorthorn.

In a beef producing animal, a broad, square frame can hardly be said to be a blemish; for if it is thoroughly well covered all over, it will carry more beef than a rounder frame. A compact, well-rounded frame, however, has always been a leading characteristic of the polled breed, and the main reason why a square Shorthorn looking frame is objected to in a polled animal is, that such a form is foreign to the breed, and therefore apt to arouse suspicions of impurity. The admirers of the breed claim for it valuable natural properties not found to an equal extent in any other breed; and they fear that should the breed lose its characteristically natural appearance, it may also lose its superiority in those valuable properties—the genuine should always bear its trade mark." Careful improvers of the breed are especially particular as to the hind quarters. While they aim at developing long, level, thick, deep quarters, they also strive to retain the rounded appearance which was originally one of the dominant characteristics of the breed.

"The head of the polled male should not be large, but should be handsome and neatly set on. The muzzle should be fine; the nostrils wide; the distance from the nostrils to the eyes of only moderate length; the eyes mild, large, and expressive; the poll high; the ears of fair size, lively, and well covered with hair; the throat clean, with no development of skin and flesh beneath the jaws, which should be heavy; the neck pretty long, clean, and rising from the head to the shoulder top, and surmounted with a moderate crest, which contributes to masculine appearance—a point in a bull. The neck should pass neatly and evenly into the body, with full neck-vein. The shoulder-blades should lie well backwards, fitting neatly into the body, and not lying awkwardly outside it; they should show no undue prominence on the shoulder-top, on the points, or at the elbow. An upright shoulder in cattle is generally accompanied by a light waist—an important, and in all breeds a much too common defect. The chest should be wide and deep, so as to give plenty of room for lung-development. The bosom should stand well forward between the fore-legs, and underneath should be well covered with flesh and fat. The crops should be full and level, with no falling off behind them; the ribs well sprung, springing out barrel-like, and neatly joined to the crops and loins; the back level and broad; the loins broad and strong; the hook-bones not too wide—narrower than in an average Shorthorn; the quarters long, even, and rounded, with no hollow from the hooks to the tail; the tail should come neatly out of the body, not too far up the back. A high tail-head was to some extent characteristic of the ancient polled breed, but it is one of the defects that are being gradually removed by the more scientific systems of breeding now pursued.

"Some good polled cattle, too, have been found to show a development of soft, worthless flesh and fat on the rounds behind, but that defect, which is disliked very much, is also obliterated. The tail should hang straight down, close to the body all the way till it comes near to the level of the flank. On both sides of the tail the quarters should turn away in a rounded manner, swelling out downwards, and ultimately passing into thick, deep thighs. The twist should be full, and the hind legs set well apart, and not detached from the body until the level of the flank is reached. The flank should be full and soft, so that a good handful may go out of it. The bottom line should be as even as the top and side lines; and the bones of the legs fine, and clean, with plenty of muscle and flesh above the knees on the fore-legs. The body should stand neatly and gracefully on the legs; and when the animal is stationary the fore-legs should be perfectly straight, and the hind-legs very slightly bent forwards below the hock. All over the frame there should be a rich and even coating of flesh. Even the hock-bones, and other prominent parts should be well covered; and above all, there should be no patchiness—no hollows, and no rolls of hard flesh, with spacks of soft useless fat between them, such as are always found in a patchy animal. Except in rare cases, the skin is fairly thick, but soft and pliable; it ought to be free over the ribs, so that one could fill one's hand of it. The hair is, as a rule, not long, but thick and soft; and in the best animals shows two growths, or rather two lengths—one short and thick, and the other longer and thinner. When walking, a good animal of the breed presents a very compact, graceful and symmetrical appearance. Indeed it is fairly enough claimed for the breed that in these and in some other respects it has hardly any equals, and no superiors. The above description refers more correctly to bulls than to cows. The latter, of course, differ considerably in character. The head is much finer, the neck thinner and cleaner, with no crest, the shoulder-top sharper; the bone altogether finer; the skin not quite so thick; the udder large, and milk vessels large and well defined."

The scarcity of hogs fit for packing is getting more pronounced every day. The aggregate shortage of the crop in the west since March 1st now reaches 830,000 hogs compared with a year ago, the total packing footing up 2,450,000, against 3,280,000 last year.

ANNUAL FARMERS' PICNIC.

For some time there has been a feeling on the part of the yeomanry living in the towns in the southeastern corner of Hilldale and southwestern corner of Lenawee counties that the meetings of the Hilldale and Lenawee Counties Farmers' Picnic Association that held its annual picnic at Devil's Lake last week, are held at too distant points for them to attend with much comfort and pleasure. In fact, not very many of them have attended for the past two or three years on this account. The society has prospered just as finely, however, there really being too many in attendance each year, now, for comfort. Some weeks ago a few of the foremost rural gentlemen in the section we spoke of set a movement on foot to establish an annual Farmers' Picnic in their own section and fixed the day and place for their inaugural fest, Thursday, August 31st, 1882, at Mallory Lake. This beautiful sheet of water is located just two miles west and two miles south of Hudson, in the center of a prosperous agricultural region, and surrounded by the most beautiful groves. There was an immense throng in attendance and everybody seemed to enjoy themselves nicely. After the festive part of the day's programme was done justice to, the exercises were carried out as follows:

1. Music by the Pittsford band.
2. Music by the Locust Corners Glee Club.
3. Prayer by Rev. F. L. Pimlott, of Locust Corners.
4. Music by the Glee Club.
5. Address of welcome by President Carmichael.
6. Music by the band.
7. Address by Rev. F. L. Pimlott.
8. Music by the band.
9. Oration by Frank Aldrich, of Pittsford.
10. Music by the Glee Club.
11. Declaration. "Devil's Lake," by Louis Niblock, of Westland.
12. Address by Geo. Wilson, of Pittsford.
13. Oration by Grant Fellows, of Hudson.
14. Music by the Glee Club.

DRYING HAY BY MACHINERY.

The difficulties experienced by British farmers in curing their hay, owing to the frequent rains and moist condition of the atmosphere during the hay-making season, have compelled them to turn their attention to some system or machine that will enable them to obviate the serious obstacles that surround them. We recently gave a short description of one of these inventions, brought out by a Mr. Neilson, and as those who have had the opportunity of seeing it at work, we append a fuller report taken from one of the British agricultural journals. A correspondent of the Irish Farmer's Gazette says the object of the invention is to enable hay to be ricked in a damp state or in any kind of weather, and then perfectly cured by its agency. "I myself," says the correspondent, "saw a rick that I was informed was put up damp, but which was, when I saw it, almost the sweetest hay I ever smelt. In the same field there were other ricks in different stages, one being about half made of the most sodden grass (I cannot call it hay) I ever saw. Another, close by, and which appeared to be made of just as wetted stuff, was in a fit state for being operated on. I examined the thermometer (which is inserted in the center of the stack through a pipe laid for that purpose) and found it to register 168. I watched the machine at work for half an hour, and then the thermometer stood 134—so that the machine lowered the temperature at rather more than a degree a minute. But it was not only heat that was extracted, for first a dense steam, and then water, came out of the mouth of the machine in a small rill. It is worked like a winnowing machine, which it somewhat resembles, and is connected to a chimney (built up the center of the stack with the help of a stuffed sack) by a nine-inch drainage pipe into the ground. The one I saw at work was capable of cooling and drying a rick of 25 tons; its cost was £12. I am informed that at the Reading show there were some as low as £5, suited to small farmers."

The inventor, in the course of his experiments, is said to have purposely sacrificed a rick in order to ascertain what temperature it would reach before the hay took fire, and the thermometer registered very nearly 200. Besides this invention of Mr. Neilson's, a Mr. Gibbs has brought out one which is described as a machine that turns grass in (Continued on eighth page.)

Horse Matters.

How John Splan Explained a Pacing Race.

The king of drivers, Dan Maco, was present, being his first appearance at any of the circuit meetings. As he sat near my chair in the reporters' gallery, I had a friendly chat. "Well, Dan, I thought nothing would draw you away from New York this season. What induced you to come?"

"Oh, I came clear up here to see the pacers you have been telling us so much about in the Spirit. I was talking with Splan while ago; didn't know but what I might get the inside tip, but after what he told me as to a steer he gave an inquisitive pool buyer called Doc, who came to him for a pointer at one of the other towns, I just about made up my mind it was best to do as others do, go in and buy, and keep buying at every stage of the game."

"What did Splan tell the Doctor?"

"As near as I could get the run of it, he said: 'We're going to have the favorite win this time—it will probably be Flora Belle. She'll take the first heat; the next one will be dead between her and Mattie Hunter. We'll all cut loose and go for the third heat, and see how that makes the betting. But the fourth heat will be the one that settles the business. All of us will stop over at the half-mile pole, and out there we'll see who's got the horse we stand to win most on he's got to win it, if it takes a week to get through with it. After the heat is over come around and I'll tell you for half the tickets what horse that one is.'—Spirit of the Times.

Was it a Jolt?

The last issue of the *Breeders' Gazette* had this to say of the recent stallion race at Rochester, N. Y., in which two noted Michigan horses figured:

"Considerable bad feeling has been aroused between the cities of Rochester and Utica, N. Y., by reason of the action taken by the Rochester Driving Park during the week of the Utica trotting meeting. By offering special inducements, the stallions Black Cloud, Jerome Eddy, and Santa Claus were induced to return to Rochester after having gone to Utica, and to trot for an alleged purse. From all accounts the race was a job, and the fact that Black Cloud and Jerome Eddy, two seasoned campaigners, with records of 2:16 and 2:17, respectively, were beaten in 2:25 by Santa Claus, a horse that had not previously trotted a race this season, and was only just out of the hands of a veterinarian, who had been treating him for rheumatism, gives color to assertions that might not otherwise carry much weight. Horses like Black Cloud and Jerome Eddy do not mysteriously lose all their speed in a week, and a difference of ten seconds to the mile, with day and track favorable, must be accounted for on some other ground than lack of condition."

From what we know of the owners of Jerome Eddy and Black Cloud we do not believe that they would lend themselves to any such swindle as is insinuated in this extract. The fact that the horses are more or less under the control of their drivers, may, however, explain why the time was not better and why the slowest horse took the race.

IMPORTANT AND TRUE.—James D. Beckett, Chicago's largest horse dealer, says of the grade Percheron-Norman horses: "They are more generally bred in the West than all other classes of draft horses, and as a proof of their popularity, the supply is far short of the demand this year, as we pay \$300 and upward to farmers for three year old grade Normans to ship to Ohio and Pennsylvania for feeders."—Chicago Tribune. Large numbers of Percheron-Norman horses in their purity are sold for breeding purposes by M. Dunham, Wayne, Ill., who has imported and bred nearly 1,000 and now has on hand about 400.

Human Prejudice.

Some one has wisely said: "There is nothing stronger than human prejudice; and this is true. Especially are some minds prejudiced against 'proprietary medicines,' because some such medicines are shams, they leap to the conclusion that all are. As well say, because some physicians are quacks, all are. There are counterfeits of all good things, even of gold coins and greenbacks. But there is true money, and there are true medicines. Among the latter is Hunt's Remedy, true and tried, and with the testimonials of hundreds who have been healed and saved from the grave by it. For all diseases of the kidneys, the liver, the urinary organs, it stands without a peer. Physicians prescribe it, and the sick call it with joy. Isn't it cheaper to buy a bottle of it yourself, and take it according to directions, than to pay for your prejudice by receiving it at the hands of your physician at ten times the cost?"

The Farm.

Cattle Disease in New York.

Considerable excitement has prevailed at Weedsport, N. Y., because of the appearance of a disease among a herd of cattle there which proved unusually and speedily fatal, and which puzzled local veterinarians. Fears were entertained that the mortality was caused by some new ailment brought in by Texas cattle which had been herded there for some time, and that it might spread among adjoining herds. The American Cultivator intimates that the facts in the case have been greatly exaggerated, and says: "A form of cattle disease exists which is not at all contagious and which was caused by improper food, deficient in nutriment. Dr. Henderson, the well-known veterinary surgeon, has visited Weedsport, killed one of the animals affected, made a thorough examination, with the following result: The autopsy disclosed the fact that the animal was suffering from a disease known as abomasitis, or inflammation of the true digestive stomach. This disease is variously termed farle bound, verigo, maw bound or impaction of the manfolds or third stomach, from the fact that the third stomach is found in a hard, dry condition. But this condition is characteristic of the disease. The fourth stomach being inflamed loses its contractile power, consequently solids cannot pass through it, and they accumulate in the manfolds and give

it that dry, hard appearance. The causes are eating dry, fibrous, indigestible substances—badly cured hay, dead grass, etc. Symptoms, loss of appetite, suspension of rumination, sluggishness, drooping head, dry muzzle, dull eyes, quickened breathing, accompanied by a moan. If the disease has lasted many days the hand pressed into the left side may detect the contents of the stomach collected into a hard mass. These symptoms are accompanied more or less by a highly disturbed condition of the nervous system, evinced by delirium, coma or convulsions, indicative of a disturbance of the brain proper, or by paralysis of the posterior extremities when the disturbance is limited to the posterior parts of the spinal cord. Treatment.—There is more in prevention than in cure. Remove the cause, give a mild cathartic, followed by sedatives and anodynes to reduce the inflammation. If the bowels don't respond in twenty-four hours it doesn't follow that you must repeat the cathartic. Time must be allowed in all inflammatory cases for the inflammation to subside, and for the weakened or debilitated parts gradually to resume their normal functions. The disease is not at all contagious. This opinion is also confirmed by Dr. George Gowland, veterinary surgeon, of Auburn, a graduate of Ontario Veterinary College, Toronto, who also visited Weedsport and made a post mortem examination of an animal that had died of the above described disease. The cause in the stomach of impaction was due to the dry, fibrous grasses eaten, deficient in all the elements of nutrition, and almost certain to cause a stoppage in one or more of those organs. In fact, it may be taken as a rule, any food which does not contain nutriment in proportion to its bulk is almost sure to bring on disease in those organs, on account of the organs having to do extra work for a less result. We are pleased to be informed that there are no symptoms of Texas cattle fever or other contagious diseases in this section of New York State."

Storing Potatoes.

As potato-harvesting will now soon be in order, and as the crop will probably be a fair average one, and operations will probably begin rather earlier than usual, we offer some views upon the best mode of storing them, which may possibly be of advantage to some.

To store potatoes properly we have to guard against heating, for although the potato will not absolutely ferment by heat as so much vegetable matter will, a heat becomes warm enough to excite any germ fungus there may be in the tuber, and this, in turn, may be sufficient to cause a decay, which can be communicated to other tubers in which no symptom of rot exists. Moisture is favorable to heating, and hence it is best to have the potato thoroughly dry before storing, if any considerable quantity is to be put away in bulk. Thus, if they are spread on a barn floor or other cool place out of the sun, before putting into the root cellar, they will be safe against rotting. When potatoes are perfectly healthy there is not so much necessity for this care in drying. Hundreds of bushels are often taken at once from the field to the cellar without any damage whatever resulting; and it is only in view of the possibility of rot that we think it advisable to take the extra precaution in drying. It is well to note that a cool shed is best to dry them in, as the tubers will otherwise absorb more heat than when they come out of the ground, and this is what we try to avoid.

There is one disadvantage in drying potatoes in this way which is always more or less connected with dry cellars, namely the great loss from shrinkage which results. In an average dry cellar there is often as much as a loss of twenty per cent in bulk from shrinkage. Thus, one hundred bushels stored away in a place like this in winter will give but eighty when taken out for sale in spring. This is often as much, and sometimes more, than the advance in spring over fall prices, and is an argument often used to induce growers to sell their crop as soon as taken up instead of keeping them for the spring rise. But this loss can be wholly avoided and the roots kept in excellent condition by carefully storing in the open ground. A dry place is to be selected, where the water can run easily away, and the potatoes laid up in long narrow ridges, say about four feet wide and as long as the quantity to be protected demands. After the whole has been collected together, a thin layer of straw, only thick enough to keep the earth from falling among the potatoes, is to be put along the sides and over the tubers, and a thin layer of soil, just enough to keep the straw in place, is thrown over. It is best not to throw more earth than this over at first, as the natural heat of the potatoes will accumulate, while it is the object to let it pass rapidly away. As soon as there is danger of frost then the potatoes should be covered thickly with soil, as the frost is certain to penetrate. In this way the potatoes are preserved at a temperature but little above the freezing point, and thus guarded against heating much, and at the same time there is little loss from evaporation—a great point gained when the bushel measure is brought out in the spring.

The great objection to this old-fashioned and excellent plan is that we cannot get at them well in the winter season; but we are only recommending it where they are required to be held over till spring. Where they are needed before that time a cellar is almost indispensable. Another objection is the extra labor which open-air banking takes. Perhaps the saving of ten or twenty per cent may be a fair set-off to this; but at any rate those who have good root cellars will generally run the risk in preference to the labor of the open ground. But we have referred to the excellence of the plan because some have no good root cellars, and others who have may yet fear rot and be glad to take the best precautions to guard against accident. Only those, however, which are apparently sound should be chosen for the outdoor practice, for those which are certainly diseased will be better preserved by an occasional sorting over during the winter season.—Germantown Telegraph.

The Iowa Agricultural College Farm.
Prof. Knapp, of the Iowa Agricultural College, gives the following synopsis of the prospective work on the farm attached to the institution, in the *Horticulturist*:
"Of the 33 varieties of wheat sown, six are entirely new to the State; five were imported from Asia last winter and one from Texas. Excepting seven varieties the wheat are not promising. Several of them were sown simply as a comparison. The plot shows the great difference in the vitality of seed under similar conditions."
"To the average Iowa farmer the one thing of superlative importance is grass, the best grasses. To meet this inquiry and to secure facilities for instructing students, a field of two acres has been selected, on which all the varieties that can be grown in Iowa, will be sown in separate plots. The present season 40 varieties are under cultivation. A careful daily account is kept with each plot, and at the proper time the hay is cut, cured, weighed, and fed to cows to test flavor."
"Butter and cheese are among the great present and prospective lines of industry in Iowa. By the liberality of the Legislature last winter, our creamery will be so enlarged and perfected in apparatus that the work of experiments in breeds of dairy cattle, and methods of manufacture will go on systematically. It will also be used by the students as a laboratory in which to acquire the art of butter and cheese manufacture. The department is keeping a careful account of the milk produced by different cows, pure bred and native. Samples of these are analyzed frequently in the chemical laboratory; all of which will be submitted at the proper time."
"The production of sorghum sugar has just attracted considerable attention. To meet this new inquiry buildings are in process of erection and machinery being put in position as rapidly as five men can work."
"Cold storage or the preservation of animal or plant food in cold, dry air, is a question full of interest. Within 30 days our building will be completed to show what the farmer can do in this direction of economy."
"Farm drainage is one of the most imperative needs of Iowa farms. Many farmers the present season have traveled considerable distances—more have written letters—to ascertain facts. The college has laid nearly five miles of tile drains this season."
"Farm improvements are another most profitable and interesting subject for investigation; how to construct convenient, cheap and durable barns, sheds and fences; the best way of preserving timber, both soft and hard, etc., etc., without limit. To all of these we have given hours of thought; with what value for the public good the examples on the college farm will in time determine."

Teasels.

The farmers of the towns of Marcellus and Skaneateles, Onondaga County, N. Y., are quite extensively engaged in the cultivation of the teasel, and are annually realizing on the product half a million of dollars. The plant was introduced into that section about fifty years ago by Dr. John Shook. His attempts at cultivation were successful from the start, but such was the prejudice at that time against everything American, that he was obliged to sell his production as French growth, and it was not until twenty years ago that the American teasel was admitted to be the best grown in the world.

The seed is sown about the beginning of May, and about one month afterward is given its first hoeing. In another two weeks it is ready to thin out, which is done by hand, one plant being left every six inches in the row, and the rows three feet apart. In August the ground is again hoed, for the last time in the first season. The second season the horse cultivator is kept at work pretty steadily for two weeks, and the plants that were formed from the seed the first year throw up a main stalk the second year, and when about two feet high a leaf makes its appearance, which gradually forms a cup around the stalk; from the base of this other branches arise, and these in turn repeat the process, until the plant has grown to forty to fifty stalks. On the end of each stalk is a teasel. The cups act as reservoirs, with a capacity of from three to five quarts of water, and thus keep the plant supplied from one rain storm to another. The main stalk teasel is called the "king," and is the male part of the plant. It blossoms first, beginning at its apex and gradually going toward the base, and while this is in operation it sheds a fine pollen over the other teasels, called queens, by which they are impregnated. They all blossom with a white flower, and as soon as this drops they are fit to cut. When taken from the fields, they are placed in drying sheds built for the purpose, and cured. When they are ready for market, they are bought by dealers, who take them into their factories and prepare them for the woolen mills. The preparation consists in clipping off, by hand, the beard that grows at the base of the teasels, cutting the stems to about three inches in length, sorting them into four different qualities, into eight different lengths, and gauging them by machinery into thirty-six different diameters. The different lengths, diameters, and qualities are packed systematically in separate boxes, measuring 24x34x5 feet. There are seven different houses engaged in shipping, employing from twenty to fifty hands each throughout the year, with trade extending from San Jose, Cal., on the west to St. Petersburg, Russia, on the east, including the Canadas and Mexico.—Gardener's Monthly.

The Price of Hops.

An article to that paper on hops, gives the following in regard to their average prices for the years from 1865 to 1881 inclusive: In October, 1877, when I quoted for the *Herald* a sale of 600 bales of hops at 5c to 10c per pound, I added—as a condolece statistics then—a quotation from the books of one of our leading hop growers, Perry S. Risley, of Marshall, showing the prices he had received for his hops during the

twelve previous years. In extreme years such tables seem especially interesting. Now that so many growers are selling their 1882 hops, in advance, for 50c per pound, I venture to repeat, in part, and bring this table to date:

Years	Selling Price	Years	Selling Price
1870	50c	1878	45c
1871	50c	1879	45c
1872	50c	1880	45c
1873	50c	1881	45c
1874	50c		
1875	50c		
1876	50c		
1877	50c		
1878	50c		
1879	50c		
1880	50c		
1881	50c		

General average for 17 years, 54c, near—ly.

Mr. Risley's figures make a very good representative table of those larger growers of this section who always put on the market a prime quality hop. The sales do not run down to the 5c sales that may be a hop grower remembers, nor up to the extreme 65 and 70c sales of which some have to tell. It will be noticed that only three years of the seventeen does the price shade down toward cost of production, and only one year does it go below, that is, accepting 12c as cost price, which is hereabouts commonly conceded to be the average cost per pound. A species of agriculture that can average for seventeen years a profit of nearly one hundred and seventy five per cent, is at least, an interesting one to a locality that has the natural advantages to foster it.

Economy in Feeding Cattle.

Prof. Brown, of the Ontario, Canada, agricultural experimental farm has been conducting a series of experiments in feeding cattle. His experiments show that corn made a daily increase of 1.91 pounds of beef, peas 1.83 and oats 1.69 per head.

He summarizes his experiments as follows:

As will be observed, the quantities of food consumed were practically alike in each case, so that the only remaining question is price of grain. This varies much every season, and may therefore be left to those interested, with the note that at the proper time of the year corn, peas and oats can be had and laid past in quantity at one cent per pound each, namely: 56c corn per bushel for corn, 60c for peas, and 34c for oats. Taking this view, of which corn has produced the cheapest beef!

Corn—2,343 lbs. gave 464 lbs. increase, costing 4-5 cents per lb.

Peas—2,397 lbs. gave 445 lbs. increase, costing 5-5 cents per lb.

Oats—2,267 lbs. gave 389 lbs. increase, costing 5-5 cents per lb.

Or, in finishing an average steer, from 1st of October to 1st of June, the cost of grain would be:

By corn, per 1,000 cattle.....\$2.075

By peas, per 1,000 cattle.....2.50

By oats, per 1,000 cattle.....2.50

Agricultural Items.

A man that lives about a thousand years later than his age is a Tusearwas (Ohio) county farmer, who hasn't sheared his sheep in five years, claiming that God intended that the sheep should wear their wool.

A FARMER in Illinois gives this as his remedy for scours in calves: "Take a fresh egg, a very little salt, as much wheat flour as the egg will wet and work with the hands into a stiff paste; when a well worked mass it up into pieces about the size of an English walnut, roll each piece into a ball, open the calf's mouth and put the balls as far down its throat as you can. Two balls twice each day is enough for a calf under two weeks old. Reduce the milk a little while giving it the balls. Give the balls two hours after feeding."

Iowa farmers are complaining that their corn is not producing ears. The tassels sit out as perfectly as usual, and the pollen seems to be abundant, but no indication of the ear. A farmer living near Ames, Ia., has 25 acres of corn that looks well at a distance, but on close inspection there are but few ears; not enough to produce more than five or six bushels to the acre. The corn is apparently healthy, vigorous, and not too thick. No cause is assigned for this unfortunate circumstance, except that vague and indefinite one known as unfavorable temperature.

THE NEW ENGLAND Farmer says: "Orchard grass succeeds best on moist, but not very wet land, and it will not endure flooding in winter, especially if the water freezes over forming a coat of ice. For this reason we prefer moist land that is slightly inclined. Two bushels of seed should be sown per acre, and if a bushel of Kentucky blue grass be added, the sod will be closer, and the yield heavier and better. If a little red clover be also added the crop will be heavier the first year. These three grasses ripen at the same time and make an excellent mixture. The very best time to sow orchard grass is probably the first half of August, provided the weather is favorable to immediate germination and growth."

J. B. ALCOCK, of Connecticut, says: "Speaking of trying ensilage, I had occasion one afternoon to bring up a heavy load of swale grass to cure at home. Next morning, by the time I spread it, the grass was steaming upon the cart and scalding hot inside, a considerable portion having turned of a rich brown with the spontaneous heat. This was selected by our Jersey oxen, as they had a chance while the spreading was going on, and eaten greedily. It had a tip top ensilage smell, being yet in the saccharine ferment. No doubt it was excellent fodder, such as any intelligent feeder can make as often as his stock relish it by soaking and heating his hay, in a feed tub, with or without grain."

A farmer who has been using his reaper to cut grain for his neighbors, and who says that though they are all honest men, he was somewhat astonished at the unusually large ears they made, says: "It has since occurred to me that I might have ascertained the dimensions of each field by counting the bundles thrown off by the reaper in going around the first time on the outside. As they were left twenty feet apart it would be easy to find the length and width in feet, multiply the two together and find the area. This method would not be so strictly correct if the fields were not rectangular. Most fields are intended to be rectangular, but few have exact right angles at all corners. When the sides or ends are of unequal length, I would add both together and divide by two; this would give the average length or width, which used as a factor, would give the contents of the field with sufficient accuracy for most purposes."

The Diamond Dyes for family use have no equals. All popular colors easily dyed, fast and beautiful. 10 cents a package.

The Poultry Yard.

A CORRESPONDENT of the Indiana Farmer reports that he has cured cholera among his chickens by the use of copperas, dissolved in water, a teaspoonful of the drug to a quart of water given as a drink. None have been injured by drinking the copperas water, but the sick have been cured. Try it.

The custom still in vogue in some parts of the country, of wringing the necks of fowls, seems a relic of barbarism. It is not only cruel, but is unsanitary. When killed in this way, instead of cutting the head off, the blood remains in the body, rendering the flesh unwholesome, as it would be in the case of an ox. This blood is very putrefactive, as all may know by allowing some to remain in the sun for a half hour in a warm weather, emitting a bad odor in a very short time. When we remember that about one half of the blood is composed of the waste and worn-out particles of the body, semi-poisonous, and that this, particularly with the purer portion, soon putrefies while remaining just where they are in life, it is evident that all of the flesh will become more or less affected by this putrefaction. Instead of this barbarous wringing of the neck, it is advisable to cut the head off at a single blow with a sharp instrument, that the blood may freely flow with all of the waste matter. That this may be done effectually, it is well to hang by the legs as soon as possible, that the blood may flow while still warm.

One great drawback to good success with poultry results from not understanding the breed kept. The Houdans are what is termed hardy fowls, but require careful treatment. They should not be herded with other fowls. Their immense crests obstruct the vision, except one way, and this renders them helpless against attacks of other fowls, which they might in fair and open combat easily repel. They are not so sensitive to cold, provided it be dry, as some other varieties. The Dorkings are very tender, and so are the Crevecoeurs. The Dorkings must have a warm place in winter. They are even more sensitive than the large combed varieties, but will compete with them in egg production, if well fed during the winter. There is no fowl more hardy after fully grown, than the Leghorns. They will withstand great cold without injury, but no breed will endure gross neglect. Leghorn chicks are delicate when young, but soon get out of the way. They are rapid growers, and mature early.

NEW ADVERTISEMENTS.

HULLING CLOVER.
Dear Sir:—The specimen of Refuse Salt you forwarded me from Bay City has been analyzed and gives the following result:
Chloride of Sodium..... 87.74 per cent.
Chloride of Potassium..... 2.24
Sulphate of Lime..... 1.05
Carbonate of Lime..... .35
Carbonate of Magnesium..... .35
Oxide of Iron..... .35
Water..... 99.91
Fine Salt of the salt works contains essentially Chloride of Sodium, containing but a very small amount of Chloride of Potassium and Oxide of Iron. For manure purposes the Refuse Salt is more valuable, as it contains nearly two per cent of Potash Salt, which is one of the essential elements in the ash of all land plants. The sensible amount of Lime and Magnesia Salts also make more valuable as manure than pure salt would be. The coloring properties of Oxide of Iron are so strong that the refuse salt is much more valuable than pure common salt, because it contains enough chloride of sodium, and in addition contains valuable plant growth. Respectfully,
E. S. FITCH, Fertilizing Salt, Bay City

NONPAREIL.
The servicable Velveteen so long in favor with English ladies, has been little used here, because of the poor qualities hitherto offered. The newly imported Nonpareil Velveteen, however, with a close pile and fine texture, is scarcely distinguishable when made up, from Lyons Velvet. It may be had in dark rich shades of sapphire-blue, garnet, blue, green, olive, sea brown, and black, suitable for street costumes, or for house dress. It is more effective when combined with satin or moire, but the taste of the season is for making such costumes entirely of the Velveteen and with very little trimming.—Harper's Bazar.

We have received direct from the manufacturers in Europe an elegant line of the above very desirable goods. Samples sent on application.

William H. Elliott
139 Woodward Ave.

S. W. LAMSON. L. J. LAMSON.
LAMSON BROTHERS,
Commission Merchants
AND BROKERS.
GRAIN AND PROVISIONS.
Room 3, 121 LaSalle street, CHICAGO.
Orders for the Open Board will receive the same attention as those for the regular.

500,000 ACRES
on the line of
WISCONSIN CENTRAL R. R.
Address, J. B. COLBY, Full particulars
FREE.
CHARLES L. COLBY,
Land Commissioner
MILWAUKEE, WIS.
IN WISCONSIN.
85-3m

LANDRETH WHEAT!
NEW UNSURPASSED
WINTER VARIETY
Send for Descriptive Circular, Testimonials, etc.
D. LANDRETH & SONS
SEED GROWERS, PHILADELPHIA, PA.
85-4t

SOW YOUR CLOVER AND TIMOTHY
WITH THE
MICHIGAN WHEELBARROW SEEDER.
Send circular describing latest improvements.
MASON GIBBS, Homer, Calhoun Co., Mich.
85-4t

NEW ADVERTISEMENTS.

SICK HEADACHE.
For the relief and cure of this distressing ailment, see *Simmons' Liver Regulator*.
Persons may avoid all attacks by occasionally taking a dose of *Simmons' Liver Regulator* to keep the liver in healthy action.

CONSTIPATION.
Should not be regarded as a trifling ailment. Nature demands the utmost regularity of the bowels. Therefore assist Nature by taking *Simmons' Liver Regulator*; it is so mild and effectual.

BILIOUSNESS.
One or two tablespoonfuls will relieve all the troubles incident to biliousness, such as Nausea, Dizziness, Headaches, distress after eating, a bitter, bad taste in the mouth.

DYSPEPSIA.
The *Regulator* will positively cure this dreadful disease. We assert emphatically what we know to be true.

COLIC.
Children suffering with colic soon experience relief when *Simmons' Liver Regulator* is administered.

FOR SALE BY ALL DRUGGISTS.

WELLS, RICHARDSON & CO'S
IMPROVED BUTTER COLOR
A NEW DISCOVERY.
For several years we have furnished the dairymen of America with an excellent artificial color for butter, so meritorious that it met with great success everywhere receiving the highest and only prizes at both International Fair Paris.

FOR SALE BY ALL DRUGGISTS.

WELLS, RICHARDSON & CO'S
IMPROVED BUTTER COLOR
A NEW DISCOVERY.
For several years we have furnished the dairymen of America with an excellent artificial color for butter, so meritorious that it met with great success everywhere receiving the highest and only prizes at both International Fair Paris.

FOR SALE BY ALL DRUGGISTS.

WELLS, RICHARDSON & CO'S
IMPROVED BUTTER COLOR
A NEW DISCOVERY.
For several years we have furnished the dairymen of America with an excellent artificial color for butter, so meritorious that it met with great success everywhere receiving the highest and only prizes at both International Fair Paris.

FOR SALE BY ALL DRUGGISTS.

WELLS, RICHARDSON & CO'S
IMPROVED BUTTER COLOR
A NEW DISCOVERY.
For several years we have furnished the dairymen of America with an excellent artificial color for butter, so meritorious that it met with great success everywhere receiving the highest and only prizes at both International Fair Paris.

FOR SALE BY ALL DRUGGISTS.

WELLS, RICHARDSON & CO'S
IMPROVED BUTTER COLOR
A NEW DISCOVERY.
For several years we have furnished the dairymen of America with an excellent artificial color for butter, so meritorious that it met with great success everywhere receiving the highest and only prizes at both International Fair Paris.

FOR SALE BY ALL DRUGGISTS.

WELLS, RICHARDSON & CO'S
IMPROVED BUTTER COLOR
A NEW DISCOVERY.
For several years we have furnished the dairymen of America with an excellent artificial color for butter, so meritorious that it met with great success everywhere receiving the highest and only prizes at both International Fair Paris.

FOR SALE BY ALL DRUGGISTS.

WELLS, RICHARDSON & CO'S
IMPROVED BUTTER COLOR
A NEW DISCOVERY.
For several years we have furnished the dairymen of America with an excellent artificial color for butter, so meritorious that it met with great success everywhere receiving the highest and only prizes at both International Fair Paris.

FOR SALE BY ALL DRUGGISTS.

WELLS, RICHARDSON & CO'S
IMPROVED BUTTER COLOR
A NEW DISCOVERY.
For several years we have furnished the dairymen of America with an excellent artificial color for butter, so meritorious that it met with great success everywhere receiving the highest and only prizes at both International Fair Paris.

FOR SALE BY ALL DRUGGISTS.

WELLS, RICHARDSON & CO'S
IMPROVED BUTTER COLOR
A NEW DISCOVERY.
For several years we have furnished the dairymen of America with an excellent artificial color for butter, so meritorious that it met with great success everywhere receiving the highest and only prizes at both International Fair Paris.

FOR SALE BY ALL DRUGGISTS.

WELLS, RICHARDSON & CO'S
IMPROVED BUTTER COLOR
A NEW DISCOVERY.
For several years we have furnished the dairymen of America with an excellent artificial color for butter, so meritorious that it met with great success everywhere receiving the highest and only prizes at both International Fair Paris.

FOR SALE BY ALL DRUGGISTS.

WELLS, RICHARDSON & CO'S
IMPROVED BUTTER COLOR
A NEW DISCOVERY.
For several years we have furnished the dairymen of America with an excellent artificial color for butter, so meritorious that it met with great success everywhere receiving the highest and only prizes at both International Fair Paris.

FOR SALE BY ALL DRUGGISTS.

WELLS, RICHARDSON & CO'S
IMPROVED BUTTER COLOR
A NEW DISCOVERY.
For several years we have furnished the dairymen of America with an excellent artificial color for butter, so meritorious that it met with great success everywhere receiving the highest and only prizes at both International Fair Paris.

FOR SALE BY ALL DRUGGISTS.

WELLS, RICHARDSON & CO'S
IMPROVED BUTTER COLOR
A NEW DISCOVERY.
For several years we have furnished the dairymen of America with an excellent artificial color for butter, so meritorious that it met with great success everywhere receiving the highest and only prizes at both International Fair Paris.

FOR SALE BY ALL DRUGGISTS.

WELLS, RICHARDSON & CO'S
IMPROVED BUTTER COLOR
A NEW DISCOVERY.
For several years we have furnished the dairymen of America with an excellent artificial color for butter, so meritorious that it met with great success everywhere receiving the highest and only prizes at both International Fair Paris.

FOR SALE BY ALL DRUGGISTS.

Horticultural.

SPARE THE FORESTS.

On the first page of the issue of the FARMER of Aug. 22nd, we observe an article, apparently editorial, which takes for its text an extract from a recent number of the *Gardener's Monthly*; and attempts to clinch it, by quoting some remarks of its editor thereupon.

In commenting upon the article in the *Monthly*, and in the general view taken of the whole subject, there seems to us to be very much that, (if we do not greatly mistake him) would be most thoroughly justified by Mr. Meehan; while the ideas attributed to the advocates of the conservation of timber, and the influence of forests upon rainfall, and the climatic conditions generally, are so thoroughly at variance with the actual views of those who may be assumed to stand as the proper representatives of climatological science; and are, moreover, so thoroughly adapted to perpetuate the careless and wasteful practice of the great majority of owners of new, timbered farms, that we are unable to resist the impulse to take up the gauntlet thus thrown down, and indulge in a review of some of the, (to us) objectionable views taken.

Many years since Baron Humboldt, one of the most eminent scientists of that, or perhaps of any other age, asserted the idea, that the forests of a country exerted a positive and favorable influence upon the amount and distribution of its rainfall; and that, quite within the recollection of man, the removal of forests, especially upon elevated lands, had been known to entail upon the surrounding region actual sterility, from diminished rainfall. That such alleged effect is often essentially modified by diverse and counteracting influences, must doubtless be conceded; and, from the very nature of the case, we must, probably, ever remain but imperfectly acquainted with many of the peculiar circumstances bearing upon the subject.

There are, however, many and important particulars, connected therewith, the nature of whose influence is too obvious to be questioned. The fact is indisputable, that the clearing of wide stretches of land invites an increased prevalence of high winds; and that such winds, when thus admitted to direct impact upon the naked land, very considerably hasten evaporation from the soil, and thus hasten the occurrence of drought; while, especially when the temperature is already low, the heat absorbed and carried away in the process, rapidly brings the temperature of the soil, and surface air, down dangerously near to the freezing point.

The residents of Michigan, for the last decade, will need but a suggestion to remind them that this reckless slaying of our forests, has, within that period, at least twice, provided the train by means of which broad regions of territory, both improved and unimproved, have been swept with the besom of destruction—a direct result of the drought, as increased by free exposure of the surface, and the reckless strewing of the forests with the debris of lumbering and slashing.

No resident of our State, for even 25 years past, can have failed to observe the greater extremes of cold, traceable, unmistakably, to excessive cutting away of forests; and that, too, with no apparent thought respecting shelter; often, in fact, with a notorious disregard to the future needs of the country, or even of the farm itself; and very many can, doubtless, recall an abundance of instances, in which lands, left in timber, have long since commanded much higher prices per acre than the very finest improved lands adjacent.

Whether from diminished rainfall, more rapid evaporation, or from the conversion of water courses into periodical torrents, with dry beds at intervening periods, we must all have observed the constant progressive shrinkage of streams of water, as clearing has progressed. These circumstances seem to us to amply demonstrate that, whether from diminished rainfall, or from increased evaporation, the conclusion is unavoidable that increased liability to drought and variability of temperature, are unavoidable consequences of our present reckless mode of removing and destroying timber.

The article in question asks, triumphantly—Is there any lack of rain in England or Ireland?—forgetful of the exceptional fact, so well known to all, that the "gulf stream" is steadily taking up the tropical warmth of our inter-continental seas, and giving it off to these specially favored lands, in clouds of vapor, without which their climate would soon assimilate to that of Labrador. Better ask, why it is that the perpetual summer of Madeira has turned it into an almost arid waste; and compelled its inhabitants to stretch out their famished hands to other climes, for the sustenance no longer yielded by their once genial climate and teeming soils, since the timber of their mountain slopes has disappeared in response to the demands of a so-called civilization; and why the climate of Spain, once so genial, has, since ages of waste have almost derived it of forests, become almost too dry and arid for ordinary agriculture. But we need hardly look outside of Michigan for a reply to "the other side" of the writer. True, the most of Michigan has been favored—much of it even too much favored this season; but is it always so? What, even after the strewing of our forests with the dry debris of fallen timber, rendered possible the destruction of millions of acres of timber and farms, oftentimes with buildings, stock, and even people, in one smouldering holocaust? Without drought this would have been impossible. In fact droughts, and even very severe ones, are far from uncommon in Michigan.

The article raises the question: "How is the settler to live—by clearing? Could he live on the bark of trees?" This suggestive question tends to place the other side in a false position. No person, entitled to be considered in any proper sense a representative of these views, has, so far as we are aware, ever objected to the opening of farms and the improvement of lands. Their objections only lie against the needless waste of timber, in careless or

excessive cutting; and the general thoughtlessness as to the availability of the actual reserves, as a means of protection. No owner of a country farm, as the rule, proposes, or should propose, to keep less than an eighth or a tenth of his land as a permanent timber lot. The idea of the thoughtful advocate of shelter or protection is not to "call this up together," into a square block at the rear of the farm, but rather to distribute it in the places where it will do the most good as a wind-break—for instance, along the west and north sides of the farm—a practice which, if only made general, would have nearly the effect, climatically considered, of a continuous shelter of forest; especially so far as the drying influence of the wind is concerned. The reference to Germany is unfortunate for the position of the writer, since that country has, long since, committed to officers chosen for the purpose the control of the cutting of timber by even the actual owners; and the whole matter is directed by a government bureau, with a primary reference to the advantage of the whole.

T. T. LYON.

Black Raspberries and Blackberries.

We are of the opinion that there is room for extension in the culture of these two species of small fruits. Black raspberries are easy of cultivation—nearly as easy as potatoes—as, if planted in rows each way, six feet by three, nearly all the culture can be done by horse and cultivator or horsehoe. They are not only easy of culture, but it looks as if there would be large demand for them, both in the green and dried condition, and at rates that will leave the grower some profit. Dried raspberries are a favorite dried fruit, and when the market is extended over the world, the demand must be enormous, and the price of the dried fruit must be considerably lower than it has ever yet been to compensate for the cost of growing.

As for profitable varieties, we have been very favorably impressed with the Tyler for an early one. We saw a large plantation on the grounds of Robert Johnston, near Shortsville, Ontario county, and the canes were remarkably vigorous. He informed us that the canes are very hardy, passing through the winters without injury, that they ripen the earliest with the exception of Davidson's Thornless; that they are very productive, and of dead black color—no bloom. They are also of excellent quality, with fewer seeds than most other black caps. Mr. Purdy of Palmyra, also speaks in the most enthusiastic terms of the Tyler.

The *Gregg* is a vigorous grower, with a very strong cane, and a marvel in production. Mr. Weeks, of West Webster, informed us that he planted 304 plants in the spring of 1881. That at the first picking this season he picked 90 quarts, and that at the second picking he picked twice that amount or 288 quarts in the first two pickings from only 304 plants. Mr. Johnston had found them very prolific, and like accounts come from every direction.

With these two varieties the season of black-caps may be extended over several weeks, and the evaporators kept running upon them until blackberries are ripe.

Blackberries.—We are not certain that this fruit can be grown so as to evaporate with profit, yet we are not certain that they may not, if such prolific varieties are planted; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

On Mr. Johnston's grounds we saw the *Western Triumph*, on much weaker soil than Mr. Hooker's, but scarcely less productive. It is much harder, even, than the Snyder, having stood the winter where the latter froze down. The canes are perfectly loaded down with fruit, which is of good size, nearly round, and sweet all the way through. It is not only sweet, but the seeds are small and not at all prominent. Like the Lawton, Kittatiny and Early Wilson are larger, and when dead ripe of exquisite flavor, they are very liable to be winter-killed, and when picked (as they usually are for market) as soon as black, are hard and sour, and have done much to bring the blackberry into disrepute as a market berry.

Mr. Johnston also grows the *Knox*, which is quite hardy, and very productive. It is later than the *Western Triumph* and is unripe. We found growing in the Knox plantation, occasional hills of blackberry unknown to us, that was very delicious. It was of good size, longer than the *Western Triumph*, soft, and of a very high flavor.

We have strong hopes, that from the numerous sorts of hardy blackberries that are multiplying around us, some may prove so hardy that we shall be able to grow them after the severest winters, and of such character that customers shall always know, when they see them in market, that they are soft and sweet, all the way through.—*Rural Home*.

Rare Orchids.

The New York *News*, after mentioning that many wealthy citizens there are devoting much attention to the cultivation of this class of plants, says: "Notwithstanding there are collections of orchids in this country valued at hundreds of thousands of dollars, probably not one person in a hundred knows what an orchid is. There is a mistaken impression that it is a plant that derives its nourishment solely from the atmosphere. This is true only of the epiphytes or air plants, which have no connection with the soil, whose roots strike in the open air, merely adhering to some foreign substance to hold the plant in position, or else hanging loose in the air upon which, chameleon like, they feed. But hundreds of the most beautiful of orchidaceous plants are terrestrial, or grow in the earth, from which they draw their support directly. A generation ago but comparatively few varieties of orchids were known. Now some 4,000 distinct species and varieties have been discovered. Volumes have been written upon their culture, and vast sums have been spent in their collection. "Of all plants the orchid is the most

singular. The flowers possess unequalled fragrance, the most exquisite hues, and the greatest diversity of grotesque configuration. They assume extravagant shapes and not infrequently bear the most striking resemblance to the heads and bodies of birds, bugs, animals and insects. One species, originating in Madagascar, has flower spikes two feet long, arching, bearing from 18 to 24 pure white and very fragrant flowers, the profile being an exact resemblance of a cockatoo. Another peculiar plant from Java bears flowers of creamy white or lemon color, with purple spots, delicately scented with musk, and very much resembling a spider. From Sierra Leone comes a curious dwarf-growing plant with greenish brown petals, the lip covered with dark colored hair so loosely attached that the slightest breath will impart a tremulous movement, which gives it the appearance of life. Among the strange and varied forms none is more remarkable than one presented by a native of Singapore, the flower of which resembles a head with long hair streaming down. Still another flower is, before opening, shaped like a Chinese foot, and after opening it forms a cup, above which rises a pair of fleshy horns from which a liquid exudes and drops into the cup. A singular genus has flowers which bear more or less resemblance to a swan; this family belongs to the golden swan orchid. There is a magnificent species from India, often growing five feet high, with flowers of white and violet, with reddish brown petals curling and shaped exactly like the horns of a bull. New Granada contributes a superb specimen with star-shaped flowers, mottled and striped with brown and yellow, like a tiger's back. From Trinidad comes an orchid, with flowers shaped so like a butterfly that the eyes are often deceived at a distance of two or three feet; they are rich dark brown, barred and edged with yellow, and it blossomed continuously for years, as soon as one flower fades another appearing in its place. One of the most singular of the orchidaceous plants has blossoms of greenish yellow, with reddish brown petals, the points lengthened out into long, tail-like appendages, which often reach two feet in length. In the Malay Islands is found a plant whose white and purple flower is shaped exactly like a spoon."

How Poppies Grow.

The opium poppy requires a sandy loam, which should be prepared for it the year beforehand. The ground must be abundantly manured, plowed and cross-plowed, the second time not so deeply as the first, for it is in the furrows that the seed is sown. About four pounds of seed is enough for an acre, and in order to facilitate the even distribution of seed it is mixed before sowing with four times its bulk of sand or fine earth. The seed is covered lightly by bush harrowing with a small tree drawn over the field by oxen. The end of October and the middle of November are especially favorable for sowing, when fine weather, coming after the first rains, has made the ground more manageable. The sprouts appear in fifteen days; but if slight frosts should happen, the seed is often killed, and the land has to be re-plowed and resown at the end of November. During the winter the roots grow fast and strong, holding out against frost, even when the leaves are bitten. As soon as spring declares itself, the plants shoot up quickly, and are then thinned and weeded, sometimes twice. Each plant makes from one to four stalks, three or four feet high, which bear their flowers at the beginning of May. A fortnight after the flowers fall the poppy-heads are fully developed, and their fitness is tested by the eye and by a light pressure with the fingers.

It is very important to detect the exact time of maturity. The too-ripe poppy-head "gives" to pressure; but when fully grown and still green, it resists. Then is the time to extract the opium, and the cultivators at once go to work rapidly, about ten persons being employed on every acre—for if the heads were allowed to become dry the juice would disappear. The seed pod being seized with the thumb and forefinger of one hand, a slight incision is dexterously made all around the middle of the pod with a small scythe-like knife held in the other. The cut must not enter the seed cavity; if it did, the juice would flow inside, and be lost. The moment the incision is made, the white juice begins to escape all around, and is left to dry and thicken in the heat of the day for six or eight hours, when it becomes a yellow, resinous-looking substance, which later turns to a darker hue. It is then scraped off with the knife, and squeezed into lumps as the gatherer proceeds. These lumps, which are each generally less than two pounds in weight, are rolled up in poppy leaves, and left for some days further to dry in the sun. While still soft they are packed into small baskets lined with cotton cloth, the balls being powdered with sorrel seed to prevent them from sticking together.

Old Strawberry Beds.

Strawberry vines that have been permitted to cover the ground and have borne one good crop of fruit, will not pay the labor of weeding out, and as a rule, should be plowed under as soon as the crop has been gathered; but if one has neglected to set a new bed the past spring, and desires to grow enough for family use, two or three rods of the old bed may be saved, and made to furnish another year what fruit is wanted for home use.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in to make paths to stand in while picking the fruit.

One of the easiest and perhaps the best way to clean out an old bed, is to spade in the vines, leaving rows about a foot in width and four feet apart. A good dressing of manure should be spaded in with the vines; and the rows of vines left standing should be well cleaned out, leaving neither weeds or grass. Some believe it best to mow off the tops of the vines, but as we have never tried this method we cannot speak of its advantage from experience; but if the vines do just as well by so doing, it would be an improvement, because it would lessen the labor of weeding out, which is the one great drawback on continuing an old bed; not only is it a tedious task to weed it out, in the first place, but the weeding must continue until cold weather, or the grass will become so thick that it will greatly lessen the crop the next season. If the land be in good condition, the space spaded up will be well covered with vines before cold weather sets in; if so, then next spring the old vines may be spaded in

Poetry.

WHAT MY LOVER SAID.

By the merest chance in the twilight gloom,
In the orchard path he met me—
In the tall, wet grass, with its faint perfume—
And I tried to pass, but he made no room:
Oh, I tried, but he would not let me go;
So I stood and blushed till the grass grew red,
With my face bent down above it,
While he took my hand as he whispered said—
(How the clover lifted each pink, sweet head
To listen to all that my lover said;
Oh! the clover in bloom—I love it!)
In the high, wet grass went the path to hide,
And the low, wet leaves hung over;
But I could not pass upon either side,
For I found myself, when I vainly tried,
In the arms of my steadfast lover,
And he held me there, and he raised my head,
While he closed the path before me;
And he looked down into my eyes and said—
(How the leaves bent down from the boughs o'er
head
To listen to all that my lover said;
Oh! the leaves hanging lowly o'er me!)
Had he moved aside a little way,
I could surely then have passed him;
And would not have heard what he had to say
Could I only have cast him.
It was almost dark, and the moments sped,
And the searching nightlight found us;
But he drew me nearer and softly said—
(How the pure, sweet wind grew still instead,
To listen to all that my lover said;
Oh! the whispering wind around us!)
I am sure he knew, when he held me fast,
That I must be all unwilling;
For I tried to go and I would have passed,
As the night was coming with its dew at last,
And the sky with stars was filling;
But he clasped me close and said I would have fled,
And he made me hear his story;
And his soul came out from his lips and said—
(How the stars crept out where the white moon
beamed
To listen to all that my lover said;
Oh! the moon and the stars in glory!)
I know that the grass and the leaves will not tell,
And I am sure the wind—precious rover—
Will carry his secret so safely and well,
And that no being will ever discover
One word of the many that rapidly fell
From the eager lips of my lover;
Shall never reveal what a fairy-like spell
They wove about us that night in the dell,
In the path through the dew-drenched clover;
Nor echo the whispers that made my heart swell
As they fell from the lips of my lover.
—HARRIS GREELY, in 1842.

"LIFE HATH ITS BARREN YEARS."

Life hath its barren years,
When blossoms fall untimely down,
When ripened fruitage fails to crown
The summer toil—when nature's frown
Looks only on our tears.
Life hath its faithless days,
The golden promise of the morn,
That seemed for light and gladness born,
Meant only noontide wreck and scorn,
Hushed harp instead of praise.
Life hath its valleys, too,
Where we must talk with vain regret,
With mourning clothed, with wild rain wet,
Toward sunlight hopes that soon must set,
All quenched in pitting dew.
Life hath its harvest moments,
Its tasseled corn and purple weighted vine;
Its gathered sheaves of grain, the blessed sign
Of plentiful ripening bread and pure rich wine.
Still fruitful for harvest tears.
Life hath its hopes fulfilled;
Its glad fruition, its life and answered prayer,
Sweeter for waiting long, whose holy air,
Indrawn to silent souls, breathes forth its rare,
Grand speech by joy distilled.

Miscellaneous.

"ARTFUL DODGERS."

Chang! twish! rattle! and amid trundling of baggage barrows, hustling of officials and rushing of outward-bound ticket-holders to secure good seats, a train rolled into the depot of a large New England town. Two bright-faced girls of twelve and fourteen years, in dark blue flannel suits, with fluffy golden hair surmounted by bewitching blue bows and black felt hats, hurried eagerly along the platform, scanning the faces of those who alighted.
"She hasn't come!" said the younger, a sudden blankness overspreading the sunny face.
"How disappointed papa and mamma will be!" said the elder. "Perhaps she has gone into the ladies' waiting-room. Let's turn back and see."
A quick step beside them, and a dainty little hand on the shoulder of each, arrested the turning process, and they found themselves face to face with a third girl, in a brown suit, with a similar fluffy hair, blue bow and felt hat. Then followed a scene of kissing and embracing, and a flood of old chatter, till a crusty old bachelor buying a newspaper scowled, and a motherly fat woman hurrying along with three children, a bird-cage and two baskets, gave them a benevolent smile, and murmured: "Pretty creatures!" as an offset.
"Oh, Nonie, if you hadn't come!" darted the two younger girls.
"What news? Has Dil set the house on fire more than three times, and have you broken any looking-glasses, Meta? Papa and mamma are well of course?"
The others shook their heads.
"Papa is down with rheumatism, and poor mamma is tired out."
"Oh, why didn't you send me a postal? I would have come right home. I had hard work to get away as it was. Jessie was so determined to have me stay for Thanksgiving."
"Oh, we're getting along all right; Joanna's as good as a regiment, you know, and Papa only took to his room yesterday. Mamma is around yet, but she acts as if she would be down with a slow fever before many days."
"No news from Elmer, I suppose?"—this with a sigh—and all three faces clouded.
"No news."
This was their one sorrow. Elmer, the gay, handsome, high-spirited brother, one year older than Nonie, had left his pleasant home two years before, leaving no clew—a half-defiant, half-regretful note. Poor Elmer! Poor, loving, longing home group, with forgiveness ready and yearning in their steadfast hearts!
The sisters walked on silently for some moments.
"I'm sorry I couldn't bring you any presents, girls," said Nonie, "but I spent all my money, and didn't like to send to papa

for more. Money goes so fast in Boston, you know, even in a two weeks' visit, and I had to buy another pair of gloves. Somebody spilled ice cream on my best ones, at a sociable."
"Never mind. We don't care. You're present enough yourself, Nonie," and Dil and Meta gave little hugs under the brown dolman.
"I'm so glad I didn't stay a day longer. Poor papa! How he must worry about not getting to the store! I've a great mind to ask Mr. Stedman to take me in papa's place, till he gets well."
"Winona Derrell! A girl like you keep books for that large store! Have you lost your senses?" exclaimed Dil, (short for Delia, which she unreasonably hated.)
"Why couldn't I do it just as well there as when I help papa at home?" asked Nonie, quietly.
"The salary could go right on, and we can surprise papa with it, when he gets well. I shan't tell mamma, either. She'll think I'm at Aunt Edie's having lessons with Grace, as usual."
"And you'll have to give up your lessons, just as you are doing your German so beautifully—and it's so kind of Aunt Edie to have you share Grace's advantage! Papa may be sick for two or three months. I wish I were half so good as you, Nonie," said Meta, with a hopeless little sigh.
Nonie pressed the plump arm, and gave her sister a loving smile.
"I can catch up evenings. There is Mr. Stedman's store now. Let's go right in and have it settled," said Nonie, with quiet decision. She had shared her parents' burdens since she was ten years old, and while it had not robbed her of her girlish brightness, it had made her constantly thoughtful and helpful.
Mr. Stedman was much surprised at three such golden-haired lasses invading his business sanctum, and bent his brows rather gravely at Nonie's proposition.
"I can try it, sir, if you will only let me," said Nonie, modestly. "I always help father with the books at home, and he says I can do it as well as he can. It will keep the place for father till he gets well, and of course we couldn't ask you to do that unless we made a substitute."
"You're a good girl—a good girl. Come here," said Mr. Stedman, abruptly, and led her to a desk covered with ledgers and day-books. "Give me a specimen of your work, and we'll see." He watched her from shaggy, (though not unkind), brows, as she neatly and rapidly executed the little task he assigned, and, womanlike, carefully wiped her pen before replacing it in the rack.
"Bravo! Consider yourself engaged for eight o'clock to-morrow morning. We'll see you in a mercantile establishment of your own, one of these days," and Mr. Stedman bowed the party out, with delightful, old-fashioned courtesy, though they were "only his book-keeper's daughters."
"Now, not a word to papa or mamma," said Winona, gayly. "Won't it be delicious to hand him the salary when he gets well? I'll beg Aunt Edie not to tell."
"What will you say if they ask you about your lessons?" said Meta, who was a trifle given to seeing "lions in the way."
"Dodge it," was the brief reply; "and so must you and Dil."
"Let's get up all sorts of surprises. We'll be 'artful dodgers,' form a club of three, called 'A. D. C.', and not a soul but ourselves will know what it means till we choose to tell them," said Dil, in high glee. She loved mysteries—innocent, pleasant ones.
"So we will! It'll be jolly!" chorused the others.
By this time they had come to a home-like house on a quiet street, with no style about it, but "heaps of comfort," as the girls said. Nonie ran up the steps and flew into the arms of a pale, but pleasant-faced, dark-eyed lady, who had been watching at the parlor window for the first glimpse of her sunny daughter.
"Precious little Nonie! Did you have a real rest, and a beautiful time, dearie, as you expected?"
"Oh, yes, indeed! Splendid! But how pale you are, mamma darling!" etc.
"Now we'll go up and see poor dear papa," said Nonie, and the suffering father almost forgot his pain in the greeting of his bright, eldest daughter. Nonie settled down to tell of her visit, while the girls brought her dinner upstairs and hovered lovingly around her, as she satisfied a healthy girl's appetite. After dinner Joanna must be visited in the kitchen. Nonie's trunk was brought and unpacked, and the evening slipped away in the dear old shabby house.
"Girls! called their mother, feebly, as the little troop filed past her door the next morning.
"Mamma's down, now! Her voice sounds sick!" said Dil, in dismay; and then they all went in to pet and pity her, and receive orders.
"I can't get up, dears. Joanna and you will have to manage for a while, and you can take turns waiting on papa. It's too bad, just as Nonie has come home, and I wanted to make such a good Thanksgiving for you all! She thought of Elmer, and sighed, pressed their little hands close to her face and kissed the rosy fingers. She "babied" her girls, though they were fast growing up.
"Never you worry, mamma dear," said Dil. "We'll get along beautifully, and take splendid care of papa—and you, too." She smiled at their affectionate eagerness.
"I'm not sick enough to need much waiting on. Rest is all I want. Just bring me a cup of tea, Dil, and be sure to have papa's toast nice and brown. Don't think of staying at home from Aunt Edie's, Nonie, child, we shall not need you. Now run along, Joanna is ringing the breakfast bell."
With a conscious flush at the allusion to Aunt Edie, Nonie kissed her mother, and the three hurried down stairs. Dil prepared two ravishing little breakfast trays, which Meta helped to carry up.
"How doleful breakfast is, by ourselves!" sighed Meta, afterward.
"Don't croak. It isn't healthy while you eat," said Dil, who never made a fuss over what couldn't be helped. "It's twenty minutes before eight, Nonie, you'll have to hurry. Don't let any of those clerks make eyes at you; and be

sure to buy a little something hot and comfortable for your dinner. You'll miss Aunt Edie's nice lunches, as well as the lessons." "I shan't starve," replied Nonie, blithely keeping her own counsel in regard to buying "something hot and comfortable." "Now, good-bye. Be sure to do every time," and with a quick little peck of a kiss on each rosy cheek, brave-hearted Nonie trudged away.
"Now we'll get ready for our surprise," said Dil, as the street door closed. "Nonie needn't be the only sacrifice! What do you think?" Then followed an absorbing conversation, of which more anon.
Nonie was abundantly equal to the new situation. At noon she ran around to Aunt Edie's to explain, and was regaled on goodies, while the bright eyes of her father's only sister glistened with a suggestive moisture, as she promised to keep the secret, and "dodge" most circumpectly, whenever she could call at the Derrell mansion.
Pleasant odors greeted Nonie's entrance at six o'clock. The table was spread with delicacies, (inexpensive but appetizing), and the girls were in a chronic state of giggle.
"Don't ask questions. Eat your supper first, and tell us if it's good," they said.
"This cream toast is delicious, and so are the 'Saratoga' potatoes. Joanna fries them better and better," said hungry Nonie.
The girls gave an unequivocal titter.
"What is the matter? I shan't eat another mouthful till you tell," said Nonie, holding a particularly tempting, brown, bloated "Saratoga" suspended in mid air.
"Joanna didn't do it! That's the joke. Dil and I got it up," said Meta. "Joanna's gone!"
"Joanna gone? Oh, not for good?" cried Nonie, with an apprehensive start. "You haven't gone and had any trouble with Joanna, girls?" and the fork dropped from the unnerver fingers.
"We had no end of trouble to make her go, but we're just as good friends as ever," said Dil.
Nonie looked completely puzzled.
"You see," said Dil, bringing some hot cream "dip" for the toast, "Meta and I made up our minds that we would have a surprise too; so we explained it to Joanna, and, after a great amount of coaxing she consented to go to her sister's for a few weeks, but made us promise solemnly that we would send for her if we got into any bad scrapes. We may just as well do the work while mamma can't hear our lessons, and we shall save \$2.50 a week besides Joanna's board, and that will be our share toward the Doings of the Dodgers."
Nonie gave a tragic groan. "You'll never be able to keep up in the world! It would be hard enough to do if mamma was around, but with both of them sick upstairs you will half kill yourselves!"
"No, we won't. It will make more dodging, of course, but it will sharpen our wits and train us in housekeeping. Here's Mrs. Beecher's blue book. 'All Around the House' and plenty of good recipes besides, and you acknowledge the supper is perfect," argued Meta, lading out another generous spoonful of Saratogas for her sister's plate.
This is a chronicle of surprises. It will therefore be sufficient to state that the domestic machinery creaked ominously a few times, and once or twice came perilously near to a dead-lock, but the blue book invariably afforded oil for the springs and wheels on consultation. Meta spiced the gingerbread with mustard, brought boiled beets to the table in their dusky overcoats, put too much powder in the washbasin, and blistered her hands, and once actually browned her beef steak in lard! Dil scorched her prettiest ruffled white apron, once ironing day, and burned her plump wrist beside (but zealously hid the scar from the unsuspecting eyes upstairs) grated too much nutmeg into a rice pudding, and baked beans (the first time) without putting any water in the bean pot. Through all culinary "tribulation," however, the invalids were tended most faithfully and cheerfully. The amount of dodging required was well nigh Machiavellian, but with the help from Aunt Edie and the family doctor, the happy pilots steered their craft of innocent secrecy past all reefs and snags.
Two or three days before Thanksgiving, Nonie acted strangely, gave irrelevant replies, several times seemed on the point of making an important communication, then provokingly checked herself.
"What can be the matter?" said Dil to Meta.
"I just knew those horrid clerks would flirt with her! I suppose one of them's the matter!" groaned Meta, in disgust.
"Nonsense! Nonie don't lose her wits over boys with fancy neckties and hair parted in the middle. Nonie has some stamina!" (This was Dil's favorite term of admiration for her elder sister.)
"Whatever it is she'll tell us before long. She can't keep it to herself," said Meta.
Dil likewise became infected with secrecy, and went through mysterious performances in her own room the day before Thanksgiving. She dressed herself for going out, made a dive for a certain little drawer in her own special bureau, took out and replaced a dozen times, with food looks, a square, whitish-brown envelope containing an important little book, then suddenly braced up, with the air of a general going into battle: "For shame, Dil Derrell! You're a selfish good-for-nothing! Stand up to your colors like a man! You started the club!" She seized the envelope resolutely, snapped the empty drawer and was out of the house before she had time to change her mind again. She returned in half an hour with suspicious red eyes, which might have come from walking in the wind.
The invalids were to come down to dinner on Thanksgiving day.
"Do you suppose we can manage that turkey, Dil?" said Meta, apprehensively surveying the sprawling specimen which the grinning market boy had just deposited on the kitchen table.
"I'd like to see the turkey that I couldn't manage—with plenty of stale bread and seasoning," replied Dil, vaingloriously, pinning back her sleeves and going briskly to work.

Meanwhile, Nonie, during the parlor, communed with herself. Throwing down the duster, she said, "I will tell Dil! It's meant not to!" and opening the door, she called to her sister.
"Is it anything special? I'm up to my elbows in crumbs, but I'll be there in three seconds," said Dil.
Nonie took from her apron pocket an advertising slip from the principal paper of the town and passed it to her sister. I ran thus:
"Sorry. Very. Will N. please call at 55 State street, if agreeable?" L. MURDIE.
"What does it mean? We don't know any person," said Dil.
Nonie made a low-voiced, but exciting communication, at which Dil jumped up and clapped her hands wildly.
"Oh, it's too splendid! Did you go? But of course you did!"
"Certainly. That's what made me late Monday night. And this afternoon, at dinner time—!" Then followed another explanation which increased Dil's delight, till a sudden thought struck her: "But will it be the best way? Would Dr. Griscom allow it? It might harm."
"Not a bit of it. I made sure of Dr. Griscom's consent. He said it would make them well sooner than anything else. We won't tell Meta till the last minute. Now we must hurry, or we shan't get done in time," and Nonie gave her duster a fresh whisk.
Dil went back to the turkey-stuffing, with her thoughts in a whirl. "It's a perfectly splendid plot! Nobody would have thought of doing it that way but Nonie, the darling!"
In the midst of a vigorous tussle with the unwieldy bird, the girls, weak with laughter and exertion, did not hear the kitchen-door open and shut. A familiar voice exclaimed: "I was just bound I'd come and cook the Thanksgiving dinner for you, anyway. Haint them poor sick folks' most dead, with your tricks and capers?"
They flew to embrace the welcome intruder.
"Oh, you blessed old Joanna! How angelic of you to come! It will be a great comfort to have it out of our minds—but we could have done it ourselves."
They gazed joyously around the old kitchen, while Joanna, smiling softly, took off her shawl and bonnet and went systematically to work.
The dinner-table was spread in the back parlor, that being the warmest for father and mother. Very carefully and lovingly were they protected from possible draughts and led down to the bower of comfort prepared for them. The "Dodgers" had had a new inspiration since Joanna relieved them of the dinner problem. Buying a few spruce wreaths, they erected a dome of greenness—"fearfully and wonderfully made,"—just above the two arm-chairs, trimmed pictures and festooned windows as if it were Christmas. One far corner was mysteriously curtained off by Dil's old shawl, from behind which now came the thrilling sound of tack-hammering and occasionally a stage whisper.
A little bell tinkled and the three girls emerged, carrying in their belts official-looking documents sealed with red wax and tied with ostentatious pink tape. Joining hands they danced a most unheard-of jig, and to a weird, Macbeth-like melody, sang the following lines:
"We're the 'Artful Dodgers' three—
"Maid of plot and mystery."
"But we've been doing you soon will see."
It ended with a wild waving of the aforementioned documents. Nonie then laid in her father's hands her envelope superscribed "Book-keeper's compliments." He broke the seals, and then Nonie's present, an installment of salary, with crisp bills fell out, with a refreshing rustle. Before he could ask a single question, in his surprise, Dil and Meta danced up with a joint package for their mother. It contained no money—only a half-sheet of foolscap, scrawled over with the following calculations:—(Dil hated to make figures—they usually resembled giraffes and camels, on a small scale.)—
"Wages saved by doing without Joanna three weeks \$2.50—\$7.50; with love from Dil and Meta."
Dil now presented her individual packet to her father, saying with a little choke and a tremble in her voice:
"Don't scold, please, I wanted to do something besides helping with the house-work."
Doctor Griscom's receipted bill! "Why? Dil, how did you ever pay it?" cried the girls, thoroughly surprised, while the parents, from love and pride, could not restrain their tears.
"I took my savings bank money," was the brief reply.
"The money that you were saving for music lessons! Dil, you are a perfect cherub!" and the girls crowned her with a chaplet of spruce, which immediately fell over her nose.
Who shall describe the pure joy of this unselfish little band and the parents' pride and gratitude, when explanations were made? Ah, doesn't the simple gift compassed by true love and self-denial far outweigh jewels and silver and fine gold?
At a signal from Nonie, Dil and Meta took their stations at each side of the curtain, and Nonie, with moist eyes and tremulous accents, delivered the ensuing little speech:
"The 'Artful Dodgers' have one more trick to exhibit, with which the performance will close. If papa and mamma will be kind enough to wish—very hard—the 'Dodgers' think they are prepared to give them something very much desired."
Her cheeks glowed, her eyes drooped—a strange, solemn hush fell on the little group, and Dil and Meta drew the curtain. On a dark background, in a walnut frame—a portrait—vivid—startling—of the lost Elmer! The handsome features, the bright blue eyes, the sunny hair tossed back from the broad forehead—true as life in their motionless, appealing beauty—all were there. The parents silently clasped hands, and Nonie made another signal, this time to the picture itself. The lips part—the eyes flash—it moves—it thrills!
"Elmer! It is my boy—my first baby!" cries the startled mother, springing from her chair, unmindful of her weakness, and, in another instant, the wanderer's head is pillowed on the one bosom that never

grows cold (except in death), the bowed form is clasped by arms that never fold in utter unforgettingness!
And then it all came out. Elmer, whom a whaling voyage had thoroughly disenchanted, shrank from coming directly home, and advertised in the daily as "L. Murdie"—hoping (and rightly) that Nonie's quick wit would fathom it. She planned the picture ruse, with Dr. Griscom's full sanction, and brought Elmer into the house just at the last, before the parents came downstairs.
They were almost too happy to think of dinner, till a ring at the front door announced Aunt Edie and Grace, and, at the moment Joanna boomed in with:
"The turkey's getting as brown as a bit 'n' nut, and the sauce an' things won't be fit to eat, if they ain't fetched in sometime 'fore dark."—Springfield Republican.

A Northern Island.

A correspondent of the London Pall Mall Gazette, writing from Sassnitz, Island of Rugen, says:
You will not discover Sassnitz in Murray's guide, nor can Mr. Cook give a ticket thither; but were it otherwise, and did occasional tourists find their way to this strange, sweet place, I might fairly be excused for describing it to those who remain behind. A strange, sweet place indeed is the little northern island from whence I write—a veritable bower of roses and greenery in the midst of a pale, gray sea.
One might fancy that in those early days of history, when the Phoenicians brought amber from the shores of the Baltic, their descriptions of the flowers and hanging woods of Rugen inspired Islands of the Blessed of the Greek Poets, so verdant, sunny, and flowery is it, if not from end to end, at least for the most part. Sassnitz, on the north side of the island, is one of the loveliest spots and one of the most frequented. Formerly a fishing village, it has now become a favorite resort for sea-bathing; handsome hotels and lodging-houses have sprung up, and three months in the year—i. e. July, August and September—the place presents an animated appearance. The townling of a few years' standing is scattered about the chalk hills and beechwoods, and so near are some of the houses to the sea that you could drop a pebble from your window into the little rippling waves.
There are no sands, and there is no shore. The cliffs, richly wooded, run sheer into the sea, and you can walk for miles in little winding paths cut in the woods, having the sea close on one side and the thick beechen groves on the other. It is this abundance of greenery and shade that renders Sassnitz and its sister townling Grampas—this also not mentioned in Murray—so delicious. No glare, no burning sun, nothing to weary eyes or brain; instead, cool umbrageous ways beside a pearly, lake-like sea. It is fairy-like, enchanting, whether you keep to the ways by the sea or skirt the lofty cliffs above, getting wide views of the sea and the narrow bays of the island.
Rugen should be within three days of London, but to travelers who like to sleep on the way the journey occupies six. It is best reached via Berlin and Stralsund, and Stralsund itself deserves a day. Nowhere in Germany are to be seen finer relics of medieval German architecture, and although the gem of gems, its quaint and beautiful Rathaus, has tumbled to pieces, several fine churches and some most picturesque old houses remain. From Stralsund the little steamer runs to Polchow in four hours, and from Polchow by road Sassnitz is reached in two hours more. Permit me to correct myself. There are no roads, properly speaking, in Rugen; no roads and no carriages. Over stony tracks and in ruts several feet deep you are jolted in vehicles without springs, or rather blanketed after the manner of poor Sancho.
Sassnitz may also be reached from Stralsund by steamer, but there is no proper landing-place here, and small boats are not to everybody's taste; so the Polchow route is preferred. I had innocently enough telegraphed to my friends in Sassnitz for a close carriage. As well ask for the moon! So, not without reluctance, I betook myself, traveling-bag in hand, to the little wayside hostelry or gashoff. It was nightfall, and this landing-place on the Baltic looked impressively lonely. What was my delight to be shown into an exquisitely clean bedroom, where, after an excellent supper of homely kind, I slept delightfully till dawn. The peace and orderliness of that little gashoff I shall not soon forget. No noise within, and without only the ripple of the waves against the green shore, for here all was verdant as at Sassnitz. These simple Rugen folk bear an excellent character, and as for cleanliness, they will bear comparison with the Swiss. As next day I was driven to Sassnitz between undulating pastures and cornfields, we came from time to time upon the sweetest, trimmest homesteads imaginable, whitewashed cottages with deep thatched roofs and oval dormers, each having its flower garden, each a picture of cleanliness and order. Anything like it I have seen nowhere else among the Baur-folk of Germany. Yet the life of the fishers and peasants here is laborious in the extreme, and they have taxes to pay with the rest. Here at Sassnitz, too, the people have a neat, cared-for look. In our cheerful furnished lodgings, close to the sea and the accommodation, although homely, leaves nothing to be desired on the score of cleanliness.

Through the Suez Canal.

After coaling at Malta we steamed down the Mediterranean, over the smoothest sea and beneath the bluest sky it was ever my happy portion to see. It was about five o'clock one morning when we first saw the light-house at Port Said, and about eight o'clock we entered between the two piers which guard the entrance to the canal and stretch far out into the Mediterranean. Passing a Turkish frigate and a French ram we slowly steamed close to the left hand shore and made fast to a buoy. No sooner were we fast than the Arabs swarmed on board, and soon coal was coming over the side and into the bunkers at rapid rate from barges alongside.
On the left hand for a long distance stretched coal sheds, for this is the great coaling port for steamers bound eastward, there being quite a difference in the price here and at the other end of the canal. On the right was the town of Port Said, while in front, lost far in the desert, appeared the canal, the grandest engineering feat of the age. Just fancy the amount of labor when it was necessary to carry the sand a mile off into the desert, and at the same time prevent the surrounding sand from drifting and rolling into its place. Just take a handful of sand out from a pile and see how quickly the hollow is filled up, and you can then form some idea of the undertaking.
I was told out there that the English abandoned the work through inability to obtain laborers at any price, and that the French only succeeded by convict labor; that the soldiers stood guard, and that a refusal to work was instantly followed by a shot, and that every foot of the canal is a monument to some poor devil sent in short order to the Arabian paradise. However this was, the canal was finished, and is to-day the only route for steamers to the east. About 1 o'clock the pilot came on board and in a few minutes we left our moorings and steamed into the canal. The channel has about 26 feet of water in it, and which is only kept at that depth by constant work at the dredges and by strengthening the sides with sinking rock and walling up the sides where they are the most threatening.
On both sides the embankments rise up to a height of 10 or 15 feet, and are composed of the dull brown sands which stretch away on both sides as far as the eye can see, the horizon shrouded in the blinding glare of the heated air rising from the burning sands till the eyes ache and the heart sickens at the dismal scene. With what relief we turn to the canal stretching like a blue sparkling ribbon and feast our eyes at the sight of a station looming up a half-mile ahead, with its little cottage, its shrubbery and trees, planted right in the midst of a desert and drawing life from a soil which has been brought 100 miles to make life endurable to the station-master, banished away out here, hundreds of miles from his own island where they were cast. And fair France! for who else but a Frenchman would ever think of bringing his garden with him, with its flowers and trees, out here in this wilderness of sands?—[St. Louis Republican.

Progress in Telephony.

Some important telephone results have been lately obtained by M. Van Rysselberghe, the Belgian meteorologist, whose very ingenious meteorograph was shown at the Paris exhibition, last year. He has succeeded in eliminating from telephonic communication through a wire the inductive action of a neighboring telegraph wire (which gives a crackling kind of noise in the telephone). Moreover, he can employ the same wire at the same time for both telephonic and telegraphic work. Thus, in a recent experiment, a message was sent from Brussels by the Morse telegraph to the directing engineer of telegraphs in Paris, and an oral message sent by telephone was distinctly heard while the Morse receiver was in action. Paris is 344 kilometres wire length from Brussels. Among other recent telephonic connections we note Venice and Milan, 284 kilometres; Berlin and Hamburg, 283 kilometres; Paris and Nancy, 353 kilometres. At the forthcoming exhibition in Munich telephony is to be tried between that town and Dresden, a distance of 350 kilometres, or about 343 miles. American accounts report experiments in progress as to what may and what may not be done in telephony on underground wires, a cable for the purpose having been laid by the American Bell telephone company along the Boston and Providence railroad. There are 21 rubber covered copper wires within a lead pipe, 10 of these being also covered with tin foil to carry off extraneous induction currents, while 10 are twisted together; the twenty first wire is covered with cotton and paraffine. A French naval committee has lately reported on the use of the telephone in giving operations. The transmitter approved as best is a small, flat, circular telephone, having interiorly two spiral magnets superposed. The Gaiffe telephone as receiver gives good effects. Microphones—both the ordinary microphone and the Adler—are pronounced less advantageous. A comparison was also made with the ordinary speaking trumpet, which proves inferior to the telephone, especially as the depth increases—owing to effects of pressure on the membrane in the case of the trumpet. Various modifications of the telephone appear from

time to time. One of these is Botcher's telephone, the peculiarity of which is that the magnet, instead of being fixed in the case, is suspended by steel wires, so that it can, to some extent, participate in the vibrations of the membrane, but in opposite direction. The magnetic variations are thus increased and stronger induction currents introduced in the coil.—[London Times.

How Chicago Gets its Name.

There are some old settlers who are positive that the Indian word, Chicago, means skunk, but there is the best of evidence that the root meaning of the word is strong, powerful. No one will deny that the stench of a skunk is both strong and powerful, but so is the odor of wild garlic, or wild onions, millions of which still white the meadows around Chicago every June. However, the word was not confined to such base meanings. When the Illinois Indian heard deafening peals of thunder, he was known sometimes to exclaim, "Chicago!" powerful, terrible! The word was sometimes applied as a complimentary epithet to warriors, signifying strong, powerful, courageous. Two hundred years ago LaSalle found an Indian village here, which is put down on early charts as Chicago, and he carried with him to France, and presented to Louis XIV., an Indian of fine physique and lofty bearing named Chicago, who was greatly petted and admired and loaded with presents. It was understood then that the chieftain's name was significant of courage and power, but whether the village was named from his chief or from the wild garlic which whitened the prairies all about it, or from some malodorous brute that chanced to be in at the christening, neither LaSalle, nor Hennepin, nor any other of the early explorers thought it worth while to record. This much, however, we know, and it is surely entitled to some consideration. In an old deed or land grant, executed to several white traders July 20, 1773, which was at one time in the archives of the Chicago historical society, one of the boundaries given is "Chicago, or Garlick Creek," showing very plainly the meaning of the word, as understood by the interpreters of more than a hundred years ago, or over forty years before "the oldest inhabitant" of the present Chicago, came here to take his first lessons in the language of the aborigines.

Twenty-Five Years' Diet on Seals.

An eminent traveler, many years since, being a guest at a large dinner party given by Lord Eldon, was relating some of the hardships to which his fellow voyagers and himself were reduced after an unfortunate shipwreck, and as a climax to their grievances recounted how they had for a fortnight been obliged to subsist entirely upon seals caught on the rocky island where they were cast. And not such bad living after all! Jocosely remarked the aged ex-chancellor: "why, for 25 years I have lived on seals, and found it uncommonly good living, too." When it is recollected that the mere holding of the great seal entitles its fortunate custodian to some £10,000 a year, to immense patronage in church and state, to be speaker of the house of lords, a privy councillor, and the head of a judicial authority in the kingdom, to be designated lord high chancellor of Great Britain, and keeper of the royal conscience, and to rank (next to the royal family) as the second subject in the realm, the reader may agree with old Lord Eldon, who had the seals for more than a quarter of a century, that "living on seals" is not such bad fare after all. The great seal of England is the instrument by which the sovereign makes known to the nation that an act of the royal prerogative has been exercised. Just as an ordinary individual seals a lease, a settlement, or an appointment, to show that he has actually, by his doing so, exercised some private right, so the sovereign, by affixing the great seal to the royal warrant, makes known to the nation the actual exercise of some regal prerogative, the concluding words of every such document being, "In witness whereof we have caused these our letters to be made patent [i. e. open] to all subjects of the realm."—[Leisure Hour.

Lace Made of Hair.

There is a large quantity of good lace made in the mountain villages of Saxony and Bohemia, and thousands of hands are thus constantly employed. This industry has of late received an addition in the manufacture of a peculiar lace or tulle made of white hair. It was introduced into the district a few years ago by a Normandy lady, and has since then extended to such a degree that now in one town (Rothenthal) alone several hundred persons live by it. The lace is made of white human hair, procured from all countries of Europe, but principally from Italy. The price paid for it ranges from a penny to two shillings per gramme, according to quality, and the fine lace made out of it is used as a foundation for wigs. This industry was originated in Paris, but the cheap wages in Saxony enabled the dealers in that country not only to compete with French lace, but even to drive it out of the Paris market itself. Still, notwithstanding the small wages, clever hands can earn from 1s. to 5s. 6d. per day, while children get from seven pence to eight pence per day, which for that neighborhood is good pay.

Sept.—New York
I escaped her hand
While I gazed in
And a far-off look
Like the twilight
While, like one too
With a throbbing
She turned from me
And gazed it with
And the gentle form
And leaped from
From my throbbing soul
Like the magic of
At last she pitted it
Of the passion she
And just as I felt
She opened her heart

(Continued from first page.)

by by tossing it about with revolving forks, in a long trough, exposing it to heated air from a furnace. It is stated that this machine is now at work in some twenty of the chief estates in England, and has proved very efficient, though pretty costly. In a recent public trial a six-acre plot was allotted for the purpose of testing it, and was cleared and stacked in six and a half hours, and required no stack-cooling whatever. It had been raised upon every day. This system has been in use for two seasons, but it is thought Mr. Nelson's will prove more popular on account of the less expense involved.

Veterinary Department

Conducted by Prof. Robert Jennings, late of Philadelphia, Pa., author of "The Horse and its Diseases," "Cattle and their Diseases," "Sheep, Swine and Poultry," "Horse Training Made Easy," etc. Professional advice through the columns of this journal to regular subscribers free. Parties desiring information will be required to send their full name and address to the office of the Farmer, No. 215 West Second Street, Detroit.

Metastatic Rheumatism.

ALMOST, Mich., Aug. 26.
Veterinary Editor Michigan Farmer.
DEAR SIR:—I have a fine six-year old mare which after a hard drive of 70 miles, went suddenly lame upon driving again a few days afterward. I noticed first a trembling of the stifle joint, and on driving her the next day she seemed to have lost the use of her hind parts, and came near falling. She dragged her hind leg on being taken out of the stable, but after driving a short distance I would see no more of it. In backing out of the stable and turning she would settle as if about to fall, then would recover. By watching closely I could find the joint snap as if the stifle was thrown partly out and then flew back. I blistered the stifle twice with no effect. Every one of her legs is affected the same way, only not so bad. What can I do for her?
R. M.

Answer.—From the symptoms given, it occurs to us that the trouble with your mare is of a rheumatic character, which usually, as in your case, shows itself by sudden lameness, with or without swelling; attacking the stifle, hock, fetlock joints, flexor tendons, muscles, pleural membrane, etc., which is not infrequently indicated by metastasis or changing from one part to another. These attacks may or may not be preceded by fever, dullness, constipation of the bowels, etc. Treatment. Give the following: Colchicum root 1 oz. divided into sixteen powders, one to be given night and morning. If there is swelling about any of the joints, tendons or muscles, foment with hot water, and then apply the following liniment: Tincture belladonna, and tincture opium each four ounces, water one pint, apply with hand friction. If the bowels are constipated give the following at noon each day until they assume a healthy condition: Scocotine aloes pulv. 2 oz., nitrate of potash and Jamaica ginger pulv. 1 oz. Mix and divide into ten powders.

Sumac.
Few who admire the brilliant colors of our native sumac, or "shoemaker," as it is frequently called, are aware that it is extensively used in tanning and dyeing; and that in North Carolina the gathering of the leaves and blossoms is a regular autumnal industry. The *New England Farmer* says:

"For the past few years the demand for the domestic product has been so small that the business of gathering and preparing it for market has come to be hardly a paying one. The imported sumac, which comes ground or powdered, is now giving manufacturers better satisfaction than the domestic, as it is thoroughly cured and takes up much less room in store. We believe, however, that this is worth only about sixty dollars per ton at the present time. The domestic will not bring over twenty-five dollars, and is slow of sale and the demand limited."
"Domestic sumac has in years past given collectors a very good business, although there is always considerable risk on account of the weather. It requires better weather than for curing grass into hay, as the sumac needs a longer time and must not be wet with rain or heavy dews. The present year's growth is all saved, including stem, leaves and blossom. It must never heat during the process of curing. When gathering the green branches, great care is taken not to let them wilt before getting on the wagons, and then the transportation must be made lively. A load as large as a horse can draw will frequently heat in the middle while being carted but a few miles, and all that heats has to be thrown out."
"When the green stuff is collected and drawn to a good place for drying, the curing is hurried along as fast as possible, to avoid bad weather in the future. When thoroughly cured, so that it will crumble when rubbed between the hands, it is run through a common hay cutter and then bagged. Sumac that is supposed to be sufficiently cured will often heat in the pile after being run through the cutter. Dryers who buy it sometimes find it necessary to shovel it over to prevent it from heating, just as grain dealers have to handle over grain to give it air. A few years ago men owning pastures or waste land in northern Rhode Island and portions of Massachusetts adjoining, found their sumac about as profitable a crop as such land produced, while now it finds no buyers."
"Domestic sumac has been advertised as wanted by dyers within two years in Boston papers, but the prices offered did not stimulate revival of the business in this vicinity. If one had a large amount of it growing very near home, so there would be little expense for cutting, and the weather should prove favorable, it would probably pay for curing at present low prices, if buyers could be found who would engage it in advance."

The Howe Scales have all the latest improvements. It is true economy to buy the best. Borden, Sellick & Co., Agents, Chicago, Illinois.

CITY ITEMS.

A REPORT from Washington announces that the new postoffice in this city will be built upon the site of the old one.

JUDG BROWN, of the United States District Court, has returned from his eastern trip, and business in this court will be resumed.

THOMAS BARLUM has made up his mind that his horse has really been stolen, as it has not been returned to him up to date. He will reward the person handsomely that returns it.

The Detroit Base Ball Club got home last week, and braced themselves up, beating the Troy club three straight games. Yesterday the two clubs went to Adrian and played an exhibition game, the score being 8 to 7 in favor of Detroit.

The man Butler who was shot on Sunday, 27th ult., is still alive, but very little hope is entertained of his recovery. Davis, the man who did the shooting, is still held in custody, awaiting the trial.

The excursion from the country last week, under the auspices of different churches, was all very successful, and added many dollars to the already overflowing treasury of the Detroit Base Ball Association.

The Detroit brewers of lager are becoming alarmed at the large amount of foreign beer that is consumed in this city, and have issued bills, in which they deplore the tendency of beer drinkers to call for Cincinnati, Milwaukee and Niagara Falls lagers. They claim that it is no better than that made in Detroit, and in some cases worse.

SHERIFF CLIPPERT now has Coup's circus on his hands, and has been giving exhibitions of the menagerie part of it for the benefit of the penniless employees. He thinks it is no trick at all to run a circus, and if nothing better turns up, when his official term closes Clippert's circus may be one of the leading amusement features of the future.

Efforts are being made to get up a two days' regatta early in October. The first day is to be devoted to amateurs, and a race between the Hillsdales and Centennials is to be one of the features if arrangements can be made with the crews. The second day will be for professionals, and will include the leading oarsmen of the country.

Last week the officials of the Grand Truck paid Detroit a visit and made a few changes in the working force at this point, the principal ones being the closing of the Great Western ticket office, and transferring the business to the Grand Truck office, with Mr. Edward Pierce in charge. In this change Detroit loses Mr. W. Robinson, the ticket agent for several years of the Great Western, who has proved one of the most efficient and accommodating officials the road has ever had in our city. He has been appointed general traveling agent in the west and southwest for the Grand Truck. While all who have had business with Mr. Robinson will regret the change, they will find in Mr. Pierce, his successor, a courteous and genial officer, who will put himself to as much trouble to accommodate a patron of his road as any one we know of.

Some time ago a young boy of this city, through bad associates, fell into evil ways, and finally got into the hands of the police. His family were respectable, and he had been well brought up. His case attracted the attention of Mr. Bradford Smith, the friend of all Detroit's bad boys. He found that the boy had good qualities in him, and that he was removed from his former associates he could be made a good citizen. The boy was left in his charge, and after a time was placed in the Detroit Safe Works, to develop a talent he had shown for painting. Under the supervision of Mr. D. J. Gray, of the Safe Works, he has made rapid progress, and gives promise of becoming a painter of considerable merit. Recently he sent Mr. Smith a handsome oil painting of Edythe's Light-house, typical of the feeling with which he regarded him. Last week he sent him a companion picture, which he named "A Moonlight Scene, or Shades and Shadows of Life," representing the moon breaking through one dark clouds, and lighting up a small piece of water surrounded by a dense forest. It was well executed, the deep shadows of the woods contrasting well with the light of the moon on the rippling water. The clouds near the moon appeared to be rendered transparent by its light, while the moon itself shone out with a brilliance that illuminated the whole heavens. Mr. Smith was greatly pleased with the picture, and said he felt as if the results of his labor in this case amply repaid him for all he had done for the boys in the past. The name of the painter is Geo. Albert Shaw, and if he only has the courage to stick to the course he has started on, we feel certain he will yet achieve a great success in the profession he has chosen. It is difficult to estimate too highly the good Mr. Shaw has done among the boys in this city, and we feel he should have some public acknowledgment of it.

Explains Itself.
Special Telegram.
Great Valley, N. Y.—Having sold your medicines for the past two and a half years can cheerfully recommend all of them, especially Baxter's Mandrake Bitters, as I have sold several gross of them, and in every instance wherever I have recommended any one to try a bottle they have come back after more. I have used all your medicines in my own family and find them all excellent family remedies. Yours truly,
J. E. CHASE, Druggist.

Price 25 cts. per bottle.

COMMERCIAL.

DETROIT WHOLESALE MARKET.

Flour.—Receipts for the week, 2,705 bbls; shipments, 2,294 bbls. The market is apparently unchanged. Quotations are the same as a week ago, and shippers appear to be doing a little more business. The higher grades are the most active. We quote:
White wheat, roller process..... \$ 7 00
Fancy white, city mills..... \$ 6 75
Choice white, city mills..... \$ 6 50
Minnesota spring..... \$ 6 25
Minnesota winter..... \$ 6 00
Wheat.—This week the market opened at the same rate as a week ago for No. 1 white, No. 2 white and red are each a little lower. The market yesterday showed more strength than for some days, owing to the light offerings. Futures were 1-16 cent, but advanced. Closing quotations were \$1 07 1/2 for No. 1 white, \$1 06 1/2 for No. 2, and \$1 05 1/2 for No. 3. In futures closing rates were as follows: September, \$1 04 1/2; October, \$1 03 1/2; November, \$1 02 1/2; the year, \$1 02 1/2.
Corn.—In the absence of any transactions reliable rates cannot be named. There is scarcely any corn to be had, and even limited inquiries could not be readily satisfied. We quote No. 2 corn at 77 1/2¢ per bu.
Oats.—Values are unsettled and tending downward. Few buyers are to be found. Yesterday No. 1 white sold at 38 1/2¢ per bu., and No. 2 mixed at 36 1/2¢, closing week.
Rye.—Market inactive and unsettled. Quotations are nominal at 70¢ per bu.
Feed.—Little or none is to be had, and the market is unsettled; even limited orders are difficult to fill. Bran is quoted at \$16 1/2¢ per bu. Corn and oats \$30 1/2¢.
Butter.—Choice is scarce, and the demand has pushed it up to 22¢ per lb. Lower grades are neglected.
Cheese.—Receivers report a fair market at 17 1/2¢ for fine State brands; other descriptions are quoted at 15¢ to 16¢.
Eggs.—Are dull; fresh crates are selling at 17¢ per doz.
Beans.—Invoices of pure quoted at \$20 1/2¢; in stock it is held at 20¢.
Clover.—Market quiet. Prices range from \$2 50 to \$3 00 per bu.
Hatter Tubs.—Choice Vermont spruce 75¢ per nest of three tubs.
Beans.—Dull and neglected. Hand-picked are worth about \$25 per bu.
Dried Apples.—Stocks are light and the market firm at 94¢ to 96¢ for common; evaporated are quoted at 10¢ to 11¢ per lb.
Apples.—Market dull and weak. Most of the stock offering is very poor. Prices range from \$1 50 to \$2 per bu.
Peaches.—Choice Early Crawford would command \$20 1/2¢ per bu., but common descriptions are all at \$1 50 per bu. The receipts are increasing.
Plums.—Choice fruit commands \$20 1/2¢ per bu., but the bulk of the receipts are poor in quality and sell at 10¢ to 12¢ per bu.
Pears.—Canning varieties are plenty and dull at \$1 00 to 1 10¢ per bushel; choice descriptions are scarce and in demand at 1 20¢ to 1 30¢ per bushel. The market is quiet and the receipts are pushing prices up to 20¢ to 30¢, but find a dull market.
Whortleberries.—Fine blueberries have been in fair supply and have commanded \$2 10¢ per bushel. Season nearly over.
Raspberries.—Few in market except a few in second hands. A good article could not be got less than 50¢ per bu., and they would be cheap at that.
Salt.—Syracuse, \$1 05 per bu.; Saginaw, 90¢ per bu. Salt by the carload; by the barrel, 15¢ to 20¢ more is charged.
Farm.—Farm rates for wood delivered are \$3 50 to \$4 00 for hickory, and \$3 75 for beech and maple; soft wood, \$4.
Provisions.—There is again an advance to note in barreled pork, while lard and smoked meats are unchanged but firm. Hogs are scarce and sell at extreme figures. Dried beef is a shade lower. Cattle and sheep are in demand as follows:
Cattle.—Receipts 1,144 head, against 1,133 the previous week. The market opened on Monday with 100 car loads on sale, and a moderate demand. The best steers brought \$7 10¢ to \$7 20¢; good steers, \$6 80¢ to \$6 90¢; fair steers, \$6 40¢ to \$6 50¢. Light and common steers sold at \$4 50¢ to \$5 00¢, and stockers and feeders at \$3 50¢ to \$4 00¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the market ruled dull, with a decline of 15 to 25 cents per hundred on Texans. Good natives remained steady at \$7 10¢ to \$7 20¢; fair natives, \$6 80¢ to \$6 90¢; light and common natives, \$6 40¢ to \$6 50¢. The receipts continued liberal on Tuesday and Wednesday and the